## Notices

OF THE
AMERICAN

## MATHEMATICAL

SOCIETY


# (Notices) <br> OF THE 

## AMERICAN MATHEMATICAL SOCIETY

Edited by Everett Pitcher and Gordon L. Walker

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The $\mathcal{C}$ Notices) of the American Mathematical Society is published by the American Mathematical Society, 321 South Main Street, P. O. Box 6248, Providence, Rhode Island 02904 in January, February, April, June, August, October, November and December. Price per annual volume is $\$ 10.00$. Price per copy $\$ 3.00$. Special price for copies sold at registration desks of meetings of the Society, $\$ 1.00$ per copy. Subscriptions, orders for back numbers (back issues of the last two years only are available) and inquiries should be addressed to the American Mathematical Society, P. O. Box 6248, Providence, Rhode Island 02904. Second class postage paid at Providence, Rhode Island, and additional mailing offices.

## FOREWORD

This is the eleventh annual Special Issue of these CNotices). This year the Special Issue contains a list of assistantships and fellowships available in mathematics, a selected list of stipends, articles on the tax status of grants, and an index of abstracts.

The list of assistantships and fellowships available in mathematics for 1970-1971 includes 412 departments of mathematics, statistics, computer science, and related mathematical disciplines, representing 324 universities and colleges. Colleges and universities have been grouped alphabetically within states, with Canadian institutions listed at the end.

The Special Issue is published as a service to the mathematical community, and in the past it has evoked enthusiastic response from both students and mathematics departments. The Society wishes to express its appreciation to those individuals associated with the institutions listed in this issue for their kind and generous help in assembling this information.

# ASSISTANTSHIPS AND FELLOWSHIPS IN MATHEMATICS IN 1970-1971 

TYPE
of financial assistance (with number anticipated in 1970-1971)

STIPEND
Amount 9 or
(dollars) 12 mo .

TUITION
if not included SERVICE REQUIRED
in stipend Hrs/Week Type

## ALABAMA

## Auburn University

AUBURN, ALABAMA 36830
L. P. Burton, Head

Department of Mathematics
Applications must be filed by February 10, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2863
Baccalaureate Degrees by Department: 89
Master's Degrees by Department: 17

PH. D. Degrees awarded during last three years by field specialization: Algebra and Number Theory, 3; Geometry and Topology, 3; Analysis and Functional Analysis, 4; Probability and Statistics, 1; Applied Mathematics, 1; TOTAL: 12

| Teaching Assistantship (40) | 2520-4800 | 9 | \$120/qtr. | 5-10 | Teaching or Equivalent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NASA, NSF Traineeship (10) | 2400-2800* | 12 |  |  |  |
| NDEA Fellowship (3) | 2400** | 12 |  |  |  |

## Auburn University

AUBURN, ALABAMA 36830
Leland H. Williams, Director
Computer Center
Applications must be filed by March 15, 1970
PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 3; Geometry and Topology, 3; Analysis and Functional Analysis, 4; Probability and Statistics, 1; Applied Mathematics, 1. TOTAL: 12

| Research Assistantship (3) | $5220-6240$ |  | $\$ 120 /$ qtr. | 26 | Research in <br> info. proc. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Computer Service (5) | $2340-3000$ | 9 | $\$ 120 /$ qtr. | 13 | Programming, <br> Consulting, etc. |

## University of Alabama in Birmingham

BIRMINGHAM, ALABAMA 35233
Arthur C. Segal, Acting Chairman
Department of Mathematics
Applications must be filed by June 1, 1970

## University of Alabama in Birmingham

BIRMINGHAM, ALABAMA 35233
B.J. Trawinski, Director

Graduate Program in Biostatistics
Applications must be filed by February 1, 1970

| Fellowship (6) * | 2400-2800 | 9 | +tuition | None |
| :---: | :---: | :---: | :---: | :---: |
| Research Assistantship (2) | 2500-3000 | 12 |  | part-time acad. yr. full-time summer |
| Summer Fellowships (3) | amount variable |  | + tuition |  |

## University of Alabama in Huntsville

HUNTSVILLE, ALABAMA 35807
J. Hoomani, Chairman

Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 107
Baccalaureate Degrees by Department: 20
Master's Degrees by Department: 7

| Teaching Assistantship | 2700 (plus tuition \& fees) | 6 | Teaching |
| :--- | :--- | :--- | :--- |

## University of Alabama, Tuscaloosa

UNIVERSITY, ALABAMA 35486
Robert L. Plunkett, Head
Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2282
Baccalaureate Degrees by Department: 100
Master's Degrees by Department: 21

PH.D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 3; Analysis and Functional Analysis, 8; Computer Science and Numerical Analysis, 1; Applied Mathematics, 9; TOTAL: 21

| Fellowship (8) | $2400-2800$ | 12 |  | NONE | NONE |
| :--- | :--- | ---: | :--- | :---: | :---: |
| Teaching Fellowship (6) | $4000-4000$ | 9 | $\$ 212.50 / \mathrm{sem}$ | 6 | Teaching |
| Teaching Assistantship (30) | $2350-3150$ | 9 | $\$ 212.50 / \mathrm{sem}$ | 6 | Teaching |
| Research Assistantship* |  |  |  |  |  |
| Scholarship (4) | $1750-2000$ | 9 | $\$ 212.50 / \mathrm{sem}$ | NONE | NONE |
| * Unknown at time of preparation. |  |  |  |  |  |

## University of Alaska

COLLEGE, ALASKA 99701
Robert W. Brown, Head
Department of Mathematics
Applications must be filed by May 1, 1970

## ALASKA

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 214
Baccalaureate Degrees by Department: 3
Master's Degrees by Department: 2

| Teaching Assistantship (6) | $3150-3600$ | 9 | $\$ 200 / \mathrm{yr}$ | 4 |
| :--- | :--- | :--- | :--- | :--- |

## ARIZONA

## Arizona State University

TEMPE, ARI ZONA 85281
Nevin Savage, Chairman
Department of Mathematics

| NUMBER OF DEGREES AWARDEI IN 1969 |  |
| :--- | ---: |
| Baccalaureate Degrees by Institution: | 3029 |
| Baccalaureate Degrees by Department: | 39 |
| Master's Degrees by Department: | 14 |

UMBER OF DEGREES AWARDEI) IN 1969
Baccalaureate Degrees by Department: 39
Master's Degrees by Department: 14

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Geometry and Toplogy, 7; Logic, 2; Analysis and Functional Analysis, 2; Differential Equations,1. TOTAL: 18

| Fellowship (8) | $2400-2800^{*}$ | 12 |  |  | Teaching |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Teaching Assistantship (49) | $2800-3500$ | 9 | $\$ 160 /$ sem | 6 |  |
| Scholarship (10) | Out of State |  |  |  |  |
|  | Fees |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

## Northern Arizona University

FLAGSTAFF, ARIZONA 86001
Charles E. Little, Chairman
Department of Mathematics
Applications must be filed by March 15,1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 900
Baccalaureate Degrees by Department: 23
Master's Degrees by Department: 13

| Teaching Assistantship (6) | 2250 | 9 | res. $\$ 272$ | 10 |
| :--- | :--- | :--- | :--- | :--- |

Note on tuition: all graduate assistants pay fees of $\$ 272$ per year. Some waivers of non-resident fees (an extra $\$ 590$ per year) are granted-generally all our non-resident G.A.'s receive these waivers.

## University of Arizona

TUCSON, ARIZONA 85721

NUMBER OF DEGREES AWARDED IN 1969
Paul C. Fife, Chairman
Baccalaureate Degrees by Institution: 2950
Department of Mathematics
Baccalaureate Degrees by Department: 38
Applications must be filed by March 15, 1970
Master's Degrees by Department: 32
PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Geometry and Topology, 7; Logic, 1; Analysis and Functional Analysis, 5; Probability and Statistics, 1; Applied Mathematics, 5. TOTAL: 20

| Fellowship (6) | $2000-3000$ | $9-12$ |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (60) | $2400-3600$ | $9-12$ | 18 | Teaching, etc. |
| Research Assistantship (10) | $2400-3600$ |  | 18 | Research, etc. |

Scholarship Tuition (6)

## ARKANSAS

## Arkansas State University

STATE UNIVERSITY, ARKANSAS 72467
J. L. Linnstaedter, Division Chairman

Division of Mathematics and Physics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 817
Baccalaureate Degrees by Department: 45
Master's Degrees by Department: 5

| Fellowship (2) | $2400-3000$ | 9 | $\$ 300$ |
| :--- | :--- | :--- | :--- |
| Teaching Assistantship (6) | $2400-3000$ | 9 | $\$ 300$ |

TYPE
of financial assistance (with
number anticipated in 1970-1971)

STIPEND
Amount 9 or
(dollars) 12 mo .

TUITION
if not included SERVICE REQUIRED
in stipend Hrs/Week Type

## University of Arkansas

FAYETTEVILLE, ARKANSAS 72701
James E. Scroggs, Chairman
Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1572
Baccalaureate Degrees by Department: 25
Master's Degrees by Department: 30

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 4; Analysis and Functional Analysis, 1; TOTAL: 7

| Fellowship (10) | $2400-3400$ | 12 |  |  |
| :--- | ---: | ---: | ---: | :--- |
| Teaching Assistantship(30) | $1350-3000$ | 9 | $\$ 300$ | $3-6$ sem. hr. /wk |
| Research Assistantship (2) | 3600 | 12 | $\$ 300$ | 20 hrs. |

## CALIFORNIA

## California Institute of Technology

PASADENA, CALIFORNIA 91109

Marshall Hall,Jr., Chairman
Department of Mathematics
Applications must be filed by February 1, 1970
$\begin{array}{cr}\text { NUMBER OF DEGREES AWARDED IN } 1969 \\ \text { Baccalaureate Degrees by Institution: } & 157 \\ \text { Baccalaureate Degrees by Department: } & 22\end{array}$
$\begin{array}{lr}\text { Baccalaureate Degrees by Department: } & 22 \\ \text { Master's Degrees by Department: } & 4\end{array}$

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 10; Geometry and Topology, 1; Analysis and Functional Analysis, 6; Probability and Statistics, 1; Computer Science and Numerical Ánalysis,2. TOTAL: 20

| $\overline{\text { Fellowship (11) }}$ | $2400-2800$ | 12 |  |
| :--- | :--- | ---: | :--- |
| Teaching Fellowship (5) | $3400-3800$ | 12 | 4 class hrs. |
| Teaching Assistantship (11) | $2500-3000$ | 9 | 4 classhrs. |
| Research Assistantship (2) | $3000-3630$ | 12 | 15 acad. yr/ |
|  |  |  | 30 summer |
| Scholarship | 2425 |  |  |

## The $\mathscr{U}$ niversity of $\mathscr{A}$ rizona epartment of $\mathbb{M}$ athematics

$\mathscr{E}$ njoy the scenic southwest with its mild climate and abundant outdoor activities while studying mathematics at the University of Arizona.
$\mathscr{T}$ he Department of Mathematics at the University of Arizona has received a generous Science Development Grant from the National Science Foundation. Funds from this grant will be used to establish graduate fellowships and to acquire special prominent lecturers who will conduct seminars for the benefit of the faculty and especially the graduate students. This seminar program will include the following topics: hydrodynamics, bifurcation, and stability theory (Spring, 1970); abstract harmonic analysis (Fall, 1970); near rings, rings, and group theory (Fall, 1970); fixed point theory (Spring, 1971). Graduate and research assistantships and some additional fellowships are also available.
$\mathscr{T}$ he department is now located in its own new, ultra-modern building which includes computer and library facilities for graduate instruction. Masters and doctoral programs are offered in a variety of pure and applied fields, including differential equations, algebra, number theory, topology, probability and statistics, analysis, functional analysis, continuum mechanics, and numerical analysis.
$\mathscr{A}$ pplication for assistantships and fellowships should be made prior to March 15. Applications for admission and any financial support may be obtained by writing to:
or Professor P. K. Bhattacharya
Department of Mathematics
University of Arizona
Tucson, Arizona 85721

## California Institute of Technology

PASADENA, CALIFORNIA 91109
NUMBER OF DEGREES AWARDED IN 1969
G.B. Whitham, Chairman

Applied Mathematics Committee
Applications must be filed by February 15, 1970
PH.D. Degrees awarded during last three years by field of specialization: Applied Mathematics, 10. TOTAL: 10

| Fellowship (5) | $2400-2800$ | 12 | + Tuition |  |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (7) | $2500-3000$ | 9 | $*$ | 4 class hrs. |
| Research Assistantship (2) | $2400-2800$ | 9 |  |  |
|  |  |  |  |  |
| * Tuition Scholarship is usually awarded with Teaching Assistantship. |  |  |  |  |
|  |  |  |  |  |
| California State College at Hayward |  |  |  |  |

HAYWARD, CALIFORNIA 94542
Bruce E. Trumbo, Chairman
Department of Statistics

| Teaching Assistantship (5) | $2500-3500$ | 9 | 15 |
| :--- | :--- | ---: | :--- |
| Reader (8) | $1000-2500$ | 12 | 15 |

## California State College at Long Beach

LONG BEACH, CALIFORNIA 90804
C. W. Austin, Chairman

Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3675
Baccalaureate Degrees by Department: 76
Master's Degrees by Department: 7
Teaching Assistantship (8) $\quad 1952-3416 \quad 9 \quad \$ 68.50^{*} \quad 4-7 \quad$ Teaching

* Plus nun-resident tuition of $\$ 30$ per unit to maximum of $\$ 445$


## California State College at Long Beach

LONG BEACH, CALIFORNIA 90801
Herbert Stone, Chairman
Department of Statistics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3997
Baccalaureate Degrees by Department: 10

## California State College at Los Angeles

LOS ANGELES, CALIFORNIA 90032
E.J. Eckert, Chairman

Department of Mathematics
Applications must be filed by February 1, 1970

| Graduate Assistant (10) | $3060-3336$ | 12 | $\$ 60$ per qtr. ${ }^{*}$ | 8 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $*$ Non-resident additional fee of $\$ 20.00$ per unit. Maximum of $\$ 297.00$ per quarter. |  |  |  |  |  |

TYPE
of financial assistance (with number anticipated in 1970-1971)

STIPEND Amount 9 or (dollars) 12 mo .

TUITION
if not included in stipend Hrs/Week

## California State Polytechnic College

SAN LUIS OBISPO, CALIFORNLA 93401
Milo E. Whitson, Head
Department of Mathematics
Applications must be filed by May 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Insitution: 1540
Baccalaureate Degrees by Department: 94
Master's Degrees by Department: 7

| Assistant Instructor (4) | $1200-1800$ | $3-9$ | $3-6$ | Teaching |
| :--- | :--- | :--- | :--- | :--- |

## California State Polytechnic College

POMONA, CALIFORNIA 91766
Harold F. Simmons, Chairman
Department of Mathematics
Applications must be filed by May 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department: 42

| Lecturers (4) $1700-3400$ | 9 | $3-6$ | Teaching |
| :--- | :--- | :--- | :--- | :--- |

## Chico State College

CHICO, CALIFORNIA 95926
Lloyd M. Cook, Head
NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1503
Department of Mathematics
Applications must be filed by September 15, 1970

## Claremont Graduate School

CLAREMONT, CALIFORNLA 91711
NUMBER OF DEGREES AWARDED IN 1969
Robert C. James, Chairman
Department of Mathematics
Applications must be filed by February 15, 1970

| Resident | $5-10$ | Reading \& Correcting <br> Papers |
| :--- | :--- | :--- |
| Non-res. $\$ 890$ |  |  |
| Foreign $\$ 255$ |  |  |

Fellowship (15)
Research Assistantship (2)
$2400-2800+12$
dependency allow.
2400 up 1210

## Fresno State College

FRESNO, CALIFORNIA 93726
Burke Zane, Chairman
NUMBER OF DEGREES AWARDED IN 1969

Department of Mathematics
Applications must be filed by March 15, 1970

[^0]
## Loyola University of Los Angeles

LOS ANGELES, CALIFORNIA 90045
B. R. Wicker, Chairman

NUMBER OF DEGREES AWARDED IN 1968
Department of Mathematics
Baccalaureate Degrees by Institution: 2400
Baccalaureate Degrees by Department: 25
Master's Degrees by Department:

## Sacramento State College

SA CRAMENTO, CALIFORNIA 95819
John L. Wulff, Chairman
Department of Mathematics and Statistics
Applications must be filed by April 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Insitution: 2660
Baccalaureate Degrees by Department: 35
Master's Degrees by Department: 4
Teaching Assistantship (6) 2800 Teaching

| Graduate Assistant (6) | 2100 | 10 | 20 | Lab. Assistant |
| :--- | :--- | :--- | :--- | :--- |

## San Diego State College

SAN DIEGO, CALIFORNIA 92115
C. V. Holmes, Chairman

Department of Mathematics
Applications must be filed by March 31, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Insitution: 3739
Baccalaureate Degrees by Department: 134
Master's Degrees by Department: 33

| Teaching Assistantship (20) | $2928-3221$ | 9 | $\$ 67.50$ | 6 |
| :--- | :--- | :--- | :--- | :--- |

## THE CLAREMONT COLLEGES

Claremont Graduate School was awarded an N.S.F. Departmental Development Grant to develop a new Ph.D. program in mathematics. This grant makes possible a number of fellowships. C.G.S. offers the Ph.D. in 14 fields and the M.A. in 23 fields. Claremont Men’s College, Harvey Mudd College, Pitzer College, Pomona College, and Scripps College have long been known for the quality of their faculties and graduates. The following members of the Graduate Faculty in Mathematics (C.G.S. mathematicians and most of those at the other Claremont Colleges) are grouped by major fields of interest, with the institution of their Ph.D. indicated.

Algebra: B. Beechler (Iowa), G. Bradley (Caltech), M. Henriksen (Wisconsin), J. Lucke (Duke), A. Pixley (Berkeley). Analysis:S. Busenberg (IIl. Inst. Tech.), J. Ferling (U.S.C.), E. Fickas (Berkeley), H. Hamilton (Brown), E. Tolsted (Brown), A. White (Stanford). Functional Analysis: S. Grabiner (Harvard), R. Ives (U. Wash.), R. C. James (Caltech), H. Mullikin (Wisconsin), G. Orland (Berkeley). Differential Equations: R. Borrelli (Berkeley), C. Coleman (Princeton), K. Cooke (Stanford). Geometry and Topology: J. Greever(Virginia), R. Williamson(Berkeley), P. Yale(Harvard). Probability and Statistics: D. Bentley (Stanford),H. Krieger (Caltech), J. Myhre (Stockholm) , H. M. Walker (Columbia). Number Theory: L. Durst (Caltech). Computer Science: F. Weingarten (Oregon State). Philosophy of Mathematics: G. Henry (C.G.S.). Visiting Professors and Guest Lecturers for 1969-71: R. D. Anderson, Mary Cartwright, E. Hewitt, W. Jurkat, J. Kelley, V. Klee, J. Korevaar, W. A. J. Luxemburg.

For application blanks and a booklet of information, write to
Professor R.C. James
Claremont Graduate School
Claremont, California 91711

# San Francisco State College 

SAN FRANCISCO, CALIFORNIA 94132
Newman Fisher, Chairman
Department of Mathematics
Applications must be filed by - open

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2500
Baccalaureate Degrees by Department: 50
Master's Degrees by Department:
8

| Graduate Assistant (3) | 1296 | 9 | $\$ 116$ | 5 |
| :--- | :--- | :--- | :--- | :--- |

## San Jose State College

SAN JOSE, CALIFORNIA 95114
Lester H. Lange, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3606
Baccalaureate Degrees by Department: 96
Master's Degrees by Department: 12
Teaching Fellowship (9) $\quad 2200-2310 \quad 9 / \mathrm{sem} . \quad \$ 70 \quad 3 \quad$ Teaching

## Stanford University

STANFORD, CALIFORNIA 94305
Ralph Phillips, Chairman
Department of Mathematics
Applications must be filed by January 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1449
Baccalaureate Degrees by Department: 47
Master's Degrees by Department: 18

PH. D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 6; Logic, 8; Analysis and Functional Analysis, 19; Probability and Statistics, 7; Computer Science and Numerical Analysis, 1; Applied Mathematics, 13; Combinatorial Analysis, 1. TOTAL: 55

| Fellowship (15) | 2400-2800 ** 12 |  |  |
| :---: | :---: | :---: | :---: |
| Graduate Assistantship (35) * | 2600-2850 | 9*** | *** |
| * Graduate Assistants serve for one quarter as Teaching Fellows, for one quarter as Teaching Assistants, and for one quarter as Research Assistants. |  |  |  |
| ** In many cases Fellows serve as Teaching Assistants or Teaching Fellows for one quarter for an additional stipend of $\$ 800-\$ 1,000$. |  |  |  |
| *** In general additional stipends of \$800 are available for study in the summer quarter. |  |  |  |
| week teaching for |  |  |  |

## Stanford University

STANFORD, CALIFORNIA 94305
George E. Forsythe, Chairman
Department of Computer Science
Applications must be filed by January 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1449
Master's Degrees by Department: 20

PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 15. TOTAL: 15

| Fellowship (10) | $2400-2800$ | 12 | None |  |  |
| :--- | ---: | ---: | :--- | :--- | :--- |
| Teaching Fellowship (1) | $3000-3000$ | 9 | None | 20 | Actual hours |
| Teaching Assistantship (9) | $2790-3060$ | 9 | None | 20 | Actual hours |
| Research Assistantship (42) | $2790-3195$ | 9 | None | 20 | Actual hours |

## Stanford University

STANFORD, CALIFORNIA 94305
Rupert G. Miller,Jr. , Chairman
Department of Statistics
Applications must be filed by January 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1449
Baccalaureate Degrees by Department: 5
Master's Degrees by Department: 46

PH. D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 23. TOTAL: 23

| Fellowship (20) | 2400 | 9 | 7 |
| :--- | :--- | :--- | :--- |
| Teaching Assistantship (6) | 2400 | 9 | 7 |
| Research Assistantship (13) | 2400 | 9 | 7 |

## University of California, Berkeley

BERKELEY, CALIFORNIA 94720
J.W. Addison,Jr., Chairman

Department of Mathematics
Applications for fellowships must be filed by
December 15, 1969 and for assistantships by February
1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 4479
Baccalaureate Degrees by Department: 135
Master's Degrees by Department: 56

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 19; Geometry and Topology, 35; Logic, 15; Analysis and Functional Analysis, 47; Applied Mathematics, 12. TOTAL: 128

| Fellowship (25) | $2400-3000^{*}$ | 9 | $* *$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (4)*** | $3402-3501$ | 9 | $* *$ | $16-20$ | Teaching |
| Teaching Assistantship (48) | $3402-3501$ | 9 | $* *$ | 14 | Teaching |
| Research Assistantship (30) | $3600-3720$ | 12 | $* *$ | 14 | Teaching |
| $50 \%$ Time Associates (9) | $3576-3762$ | 9 | $* *$ | 14 | Teaching |
| $50 \%$ Time Acting/ | 4182 | 9 | $* *$ |  |  |
| Instructorship (6) |  |  |  |  |  |
| *Plus allowance for dependents. |  |  |  |  |  |
| ** University Registration fees, \$100 per quarter; Berkeley Campus fees, $\$ 5.50$ per quarter; Non-resident |  |  |  |  |  |
| tuition fee, \$400 per quarter (a limited number of waivers are available); foreign student health insurance |  |  |  |  |  |
| charge, \$9 per quarter. |  |  |  |  |  |

## University of California, Berkeley

BERKELEY, CALIFORNIA 94720
E.L. Scott, Chairman

Department of Statistics
Applications for assistantships must be filed by February 1, 1970 and for fellowships by December 15, 1969

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 22; Biostatistics, 3. TOTAL: 25

| Fellowship (23) | $2000-3600$ | $9 \&$ | variable |  |
| :--- | :--- | :--- | :--- | :--- |
| Teaching \& Research | $3051-3100$ | 9 | 20 | variable |
| Assistantship combination (36) |  |  |  |  |

TYPE
of financial assistance (with
numbos antinipated in 1970-1971)

STIPFND
Amount 9 or
(dellars) 12 mo .

TUITION
if not included
in stiperd Hrs/Week

## University of California, Davis

DAVIS, CALIFORNIA 95616
E.B. Roessler, Chairman

Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1646
Baccalaureate Degrees by Department: 55
Master's Degrees by Department: 4

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 4; Analysis and Functional Analysis, 5; Probability and Statistics, 2. TOTAL: 11

| Fellowship (8) | $2000-2800$ | 12 | $\$ 1200$ |  |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Teaching Fellowship (2) | 3400 | 9 | $\$ 1200$ | 16 | Teaching, office |
| Teaching Assistantship (24) | 3400 | 9 | $\$ 1200$ |  | hrs., grading |
|  |  |  | $\$ 1200$ |  |  |

## University of California, Irvine

IRVINE, CALIFORNIA 92664
Ray A. Kunze, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 568
Baccalaureate Degrees by Department: 42
Master's Degrees by Department: 11

PH. D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 1; Analysis and Functional Analysis, 2. TOTAL: 3

| Fellowship (7) | $2400-2800^{*}$ | 12 | $* *$ | variable | Res. for Ph. D |
| :--- | :--- | ---: | :---: | :---: | :--- |
| Teaching Fellowship (2) | $3402-3501$ | 9 | $* *$ | 20 | Community Teaching |
| Teaching Assistant (14) | $3402-3501$ | 9 | $* *$ | 20 | Teaching |
| Research Assistantship (4) | $3600-3720$ | 12 | $* *$ | 20 | Research |

* Minimum/maximum plus $\$ 500$ each dependent.
** $\$ 400$ per qtr. non-resident; resident incidental fee $\$ 100$--usually waived for above titles.


## University of California, Los Angeles

LOS ANGELES, CALIFORNIA 90024
Earl A. Coddington, Chairman
Department of Mathematics
Applications must be filed by January 31, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 7176
Baccalaureate Degrees by Department: 149
Master's Degrees by Department: 37

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 7; Geometry and Topology, 7; Logic, 5; Analysis and Functional Analysis, 11; Probability and Statistics, 6; Computer Science and Numerical Analysis, 6; Applied Mathematics, 1; Diff. Equations , 3; Riemann Surfaces, 4 ; Convexity , 4; Diff. Inequalities ,2. TOTAL:56

| Fellowship (20) | $1800-2400$ | $9 / 12$ | Non-resident <br> fee $\$ 400 / q t r$. |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (4) | $3447-4152$ | 9 mos. |  | 20 | Teaching |
| Teaching Assistantship (43) | $3447-4152$ | $9 \operatorname{mos}$. | Non-resident | 20 |  |
| Research Assistantship (10) | $4050-4476$ |  | fee $\$ 400 / q t r$. |  |  |

## University of California, Riverside

RIVERSIDE, CALIFORNIA 92502
F.T. Metcalf, Chairman

Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 646
Baccalaureate Degrees by Department: 36
Master's Degrees by Department: 15

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 5; Geometry and Topology, 4; Analysis and Functional Analysis, 4; Probability and Statistics, 4; Computer Science and Numerical Analysis, 1; Applied Mathematics, 5. TOTAL: 23

| Fellowship (8) | $2200-2800$ | 11 | 6 |
| :--- | ---: | ---: | ---: |
| Teaching Fellowship (6) | $3402-3501$ | 9 | 6 |
| Teaching Assistantship (14) | $3402-3501$ | 9 | 6 |

## University of California, San Diego

LA JOLLA, CALIFORNIA 92037
Helmut Rלhrl, Chairman
Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 206
Baccalaureate Degrees by Department: 21
Master's Degrees by Department: 13

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Analysis and Functional Analysis, 4. TOTAL: 6

| Fellowship | 2400-3400 | 12 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Teaching Fellowship | 4158 | 9 |  |  |
| Teaching Assistantship | 3402 | 9 | 1/2 time | Teaching |
| Research Assistantship | 3600-3720* | 11 | 1/2 time |  |

## University of California, Santa Barbara

SANTA BARBARA, CALIFORNIA 93106
David L. Outcalt, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1939
Baccalaureate Degrees by Department: 48
Master's Degrees by Department: 9

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Geometry and Topology, 4; Analysis and Functional Analysis, 1. TOTAL : 11

| Fellowship (10) | $2400-2800$ | 12 | $\$ 981 / y r$ |  |  |
| :--- | :--- | :---: | :--- | :--- | :--- |
| Teaching Fellowship | 4158 | 9 | (for out- |  | Teaching |
| Teaching Assistantship (19) | $3402-3501$ | 9 | of -state | 6 |  |
| Research Assistantship (8) | $3600-3720$ | 11 | students) |  |  |
| Community Teaching Fellows (4) | $3402-3501$ | 9 |  |  |  |

TYPE
of financial assistance (with
SIIPPEND
Amount 9 or (dollars) 12 mo .

TUITYON
if not inciuded SERVICE REQUIRED
in stipend Hrs/Week Type

## University of Southern California

LOS ANGELES, CALIFORNIA 90007
H. A. Antosiewicz, Chairman

Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1462
Baccalaureate Degrees by Department: 34
Master 's Degrees by Department: 15

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 6; Analysis and Functional Analysis, 2; Probability and Statistics, 1. TOTAL: 11

| Fellowship (6) | $2400-2800$ | 12 |  |  |
| :--- | ---: | ---: | :--- | :--- |
| Teaching Fellowship (4) | $2550-2850$ | 9 | 4 units | Teaching |
| Teaching Assistantship (10) | $3000-3400$ | 9 | $4-6$ units | Teaching |
| Research Assistantship (10) | $3000-3400$ | 9 | 20 hrs. | Research |
| Teaching/Research | $3000-3400$ | 9 | 4 units | Teaching/ |
| Assistantships (8) |  |  | Research |  |

## COLORADO

## Colorado School of Mines

GOLDEN, COLORADO 80401
Joseph R. Lee, Head
Department of Mathematics
Applications must be completed before March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution 230
Baccalaureate Degrees by Department: 19
Master's Degrees by Department: 1

| Fellowship (3) | 2400 | 9 | Included |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (5) | 2600 | 9 | Included | 15 | Teaching |
| Research Assistantship (3) | $2000-3000$ | 9 | $\$ 300-1100$ | $20-30$ | Research |

## Colorado State College

FORT COLLINS, COLORADO 80521

NUMBER OF DEGREES AWARDED IN 1969
Milton E. Rose, Head
Department of Mathematics \& Statistics
Applications must be filed by March 15,1970
Baccalaureate Degrees by Institution: 2247
Baccalaureate Degrees by Department: 106
Master's Degrees by Department: 78
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Analysis and Functional Analysis, 3; Probability and Statistics, 8; Applied Mathematics, 1. TOTAL: 13

| Fellowship (6) (Math) | $2400-3500$ | 12 |  |  |
| :--- | :--- | :--- | :--- | :--- |
| (10) (Stat) | $2400-4500$ | 12 | 12 | Res. ;class work |
| Teaching Assistantship (5) | $2430-2700$ | 9 | 12 | Teaching (Stat) |
|  | (5) | 3000 | 9 | 10 |
|  | $2400-3600$ | 9 | varies | Teaching(Com. Sci) |
| (20) | $2400-4200$ | $9-12$ | 20 | Teaching (Math.) |
| Research Assistantship (2) | tuition waiver |  | Research (Stat) |  |
| Scholarship (1) |  |  |  |  |

## University of Colorado

BOULDER, COLORADO 80302
S.M. Ulam, Associate Chairman

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2999
Baccalaureate Degrees by Department: 78
Master's Degrees by Department: 19
PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 9; Logic, 3; Analysis and Functional Analysis, 7; Probability and Statistics, 1; Computer Science and Numerical Analysis, 1; Applied Mathematics, 1. TOTAL: 22

| Fellowship (25) | $2500-2800$ | 9 |  | Full time study |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (70) | $2650-2650$ | 9 | In State | 6 |
| Research Assistantship (5) | $2850-2850$ |  | NONE | 20 |

## University of Colorado

BOULDER, COLORADO 80302
E.R. Krueger, Acting Chairman

Institute for Computing Science
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2999
Master's Degrees by Department:
1

| Teaching Assistantship (7) | 2650 | 9 | No | 20 |
| :--- | :--- | :--- | :--- | :--- |
| Programming Assistant (3) | 2800 | 9 | Yes | 20 |

## University of Denver

DENVER, COLORADO 80210
Herbert J. Greenberg, Chairman
Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1310
Baccalaureate Degrees by Department: 35
Master's Degrees by Department: 8

| Fellowship (3) |  |  |  |  |
| :--- | ---: | ---: | ---: | :--- |
| Teaching Assistantship (12) | $2500-2900$ | 9 | $5-7$ | Teaching Asst. |
| Research Assistantship (7) | $3800-4400$ | 12 | $1 / 2$ time | Research Asst. |

## Western State College of Colorado

GUNNISON, COLORADO 81230
William E. Dorgan, Chairman
Division of Natural Science and Mathematics
Applications must be filed by April 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 396
Baccalaureate Degrees by Department: 25

| Teaching Assistantship (1) | 1800 | 9 | Instate $\$ 384$ |
| :--- | :--- | :--- | :--- |
|  |  | Outstate $\$ 834$ | One 3 hour class |

## CONNECTICUT

## Central Connecticut State College

NEW BRITAIN, CONNECTICUT 06050
Richard L. Mentzer, Chairman
Department of Mathematics
Applications must be filed by May 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 789
Baccalaureate Degrees by Department: 60
Master's Degrees by Department: 24

## University of Bridgeport

BRIDGEPORT, CONNECTICUT 06602
H. Margaret Elliott, Chairman

Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department:

| Teaching Assistantship (2) | $\$ 2000+$ | 12 |
| :--- | :--- | :--- | | Teaching or other |
| :--- |
| equivalent service |

## University of Connecticut

STORRS, CONNECTICUT 06268
Elliot S. Wolk, Head
Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2177
Baccalaureate Degrees by Department: 77
Master's Degrees by Department: 5

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Nụmber Theory, 2; Geometry and Topology, 1; Logic, 1. TOTAL: 4

| Fellowship (5) | $2400-3000$ | 9 |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- |
| Teaching Fellowship (8) | $2910-3750$ | 9 | $\$ 290$ | 3 | Teaching |
| Teaching Assistantship (10) | $2910-3750$ | 9 | $\$ 290$ | $4-6$ | Teaching |
| Rescarch Assistantship (2) | $2910-3750$ | 9 | $\$ 290$ | $10-20$ | Research |
| Scholarship (3) | $750-1000$ | 9 | $\$ 290$ |  |  |

## University of Connecticut

STORRS, CONNECTICUT 06268
NUMBER OF DEGREES AWARDED IN 1969
Gottfried E. Noether, Head
Baccalaureate Degrees by Institution:
Department of Statistics
Applications must be filed by March 1, 1970
Master's Degrees by Department:

PH. D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 7. TOTAL: 7

| Fellowship (7) | $2000-3600$ | variable | $\$ 290^{*}$ |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Teaching Fellowship (3) | $2910-3750$ | 9 | $\$ 290^{*}$ | 4 | discussion |
| Teaching Assistantship (4) | $2910-3750$ | 9 | $\$ 290^{*}$ | 8 | discussion |
| Research Assistantship (1) | $2910-3750$ | 9 | $\$ 290^{*}$ |  |  |
|  |  |  |  |  |  |
| *plus $\$ 300$ for out-of-state |  |  |  |  |  |

TYPE
of financial assistance (with number anticipated in 1970-1971)

STIPEND
Amount 9 or
(dollars) 12 mo .

## University of Hartford

WEST HARTFORD, CONNECTICUT 06117
Cecilia Welna, Chairman
Department of Mathematics
Applications must be filed by April 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department:

Fellowship (2) $2400 \quad 9 \quad 6$

## Wesleyan University

MIDDLETOWN, CONNECTICUT 06457
W. Wistar Comfort, Chairman

Department of Mathematics
Applications must be filed by March 15, 1969

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 300
Baccalaureate Degrees by Department: 5
Master's Degrees by Department: 2

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory , 4; Geometry and Topology, 4; Analysis and Functional Analysis, 1. TOTAL 7
$\left.\begin{array}{lllll}\hline \text { Fellowship (3) } & 2450-2800 & 9 & \text { waived } & \leqq 5 \\ \text { Teaching Assistantship (11) } & 2450-2800 & 9 & \text { waived } & \leqq 5 \\ \text { Research Assistantship (3) } & 2450-2800 & 9 & \text { waived } & \leqq 5\end{array}\right\} \quad$ Quiz Section $\quad$ and/or

Remark: Dependency allowances, and summer stipends, are frequently available upon request.
Four Teaching Assistantships have been made available as of January 1, 1970. Applicants should write the Chairman immediately.

## Yale University

NEW HAVEN, CONNECTICUT 06520
William S. Massey, Chairman
Department of Mathematics
Applications must be filed by January 20, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1017
Baccalaureate Degrees by Department: 30
Master's Degrees by Department: 11

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 9; Geometry and Topology, 6; Analysis and Functional Analysis, 14. TOTAL: 29

| Fellowship (5) | $1800-1800$ | 9 |
| :--- | ---: | ---: |
| Research Assistantship (17) | $1800-1800$ | 9 |
|  | $2400-2800$ | 12 |
| NSF Traineeships (7) | $1800-2100$ | 9 |
|  | $2400-2800$ | 12 |

Note: 3rd and 4th year students may earn \$600-1000 additional for teaching.

## THE UNIVERSITY OF HARTFORD • . . WEST HARTFORD, CONNECTICUT

offers M. A. and M. A. T. degree programs in Mathematics.
Teaching fellowships are available paying $\$ 2400$ for a nine month period. For teaching fellows, tuition and fees are waived. For further information write to:

Dr. Cecilia Welna, Chairman<br>Department of Mathematics<br>University of Hartford<br>West Hartford, Connecticut 06117

## Yale University

NEW HAVEN, CONNECTICUT 06520
Leonard J. Savage, Chairman
Department of Statistics
Applications must be filed by January 20, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1017
$\begin{array}{lr}\text { Baccalaureate Degrees by Institution: } & 1017 \\ \text { Master's Degrees by Department: } & 1\end{array}$

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 3. TOTAL: 3
Fellowship (15) 12 Included None

## DELAWARE

## University of Delaware

NEWARK, DELAWARE 19711
Russell Remage, Jr., Chairman
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1246
Baccalaureate Degrees by Department: 37
Master's Degrees by Department: 17

PH. D. Degrees awarded during last three years by field of specialization: Analysis and Functional Analysis, 2. TOTAL: 2

| Fellowship (9) | $2400-2800$ | 12 | 6 | Teaching |
| :--- | ---: | ---: | ---: | ---: |
| Teaching Assistantship (25) | $2500-3000$ | 9 | 20 | Research |

## DISTRICT OF COLUMBIA

## American University

WASHINGTON, D.C. 20016
Steven H. Schot, Chairman
Department of Mathematics and Statistics
Applications must be filed by February 1, 1970
PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Probability and Statistics, 1. TOTAL: 2

| Fellowship (1) | 2800 | 12 | $\$ 12 / \mathrm{cr}$. | None |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (3) | 2800 | 10 | $\$ 12 / \mathrm{cr}$. | $15 \mathrm{hrs}$. per.wk. |

## Catholic University of America

WASHINGTON, D.C. 20017
Raymond W. Moller, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
1153
Baccalaureate Degrees by Department: 9
Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Analysis and Functional Analysis, 8; Probability and Statistics, 6. TOTAL: 16

| Fellowship (8) | $1800-2800$ | $9-12$ |  | None | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (10) | 2400 | 9 |  | 7 | None |
| Research Assistantship (2) | 3000 | 9 | Half $\$ 1000)$ | None |  |
| Scholarship (2) | Tuition only |  |  |  |  |

## George Washington University

WASHINGTON, D.C. 20006
NUMBER OF DEGREES AWARDED IN 1969
Hewitt Kenyon, Chairman
Baccalaureate Degrees by Institution:
Department of Mathematics
Baccalaureate Degrees by Department: 10
Applications must be filed by February 1, 1970
Master's Degrees by Department:
PH. D. Degrees awarded during last three years of field of specialization: Geometry and Topology, 1; Logic, 1 . TOTAL: 2

| Fellowship (2) | $2400-2800$ | 9 | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (8) | $2500+$ tuition | 9 |  |  |
| Research Assistantship (1) |  |  |  |  |

## George Washington University

WASHINGTON, D. C. 20006
NUMBER OF DEGREES AWARDED IN 1969
S. Kullback, Chairman

Baccalaureate Degrees by Institution:
Department of Statistics
Baccalaureate Degrees by Department: 4
Master's Degrees by Department: 4

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 906
Baccalaureate Degrees by Department: 8
Master's Degrees by Department: 1

PH.D. Degrees awarded during last three years by field of specialization: Analysis and Functional Analysis, 7. TOTAL: 7

| Fellowship (3) | $2800-3200$ | 12 | None | None |  |
| :--- | ---: | ---: | :--- | :--- | :--- |
| Teaching Fellowship (11) | $2600-3000$ | 9 | None | $10-12$ | Teaching one |
| Fellow Computer Center (1) | $2600-3000$ | 9 | None | 10 | course |

## FLORIDA

## Florida Atlantic University

BOCA RATON, FLORIDA 33432
John M. Freeman, Chairman
Department of Mathematics
Applications must be filed by April 1, 1970
Late applications will be considered

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1114 Baccalaureate Degrees by Department: 19

| Teaching Assistantship (6-8) | $2500-3000$ | 9 | $\$ 150 /$ qtr | $3-6$ | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Research Assistantship (4) | $2500-3000$ | 9 | $\$ 150 / q t r$ | $12-20$ | Research |

## Florida Institute of Technology

MELBOURNE, FLORIDA 32901
D.R. Clutterham, Head

Department of Mathematical Sciences
Applications must be filed by February 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department: 18
Master's Degrees by Department: 8

| Teaching Assictantship (8) | 5000 | 9 | incl. | $12-16$ | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Florida State University

TALLAHASSEE, FLORIDA 32306
NUMBER OF DEGREES AWARDED IN 1969
O.G. Harrold, Chairman

Baccalaureate Degrees by Institution:
3442
Department of Mathematics
Applications must be filed by January 15, 1970
Baccalaureate Degrees by Department: 73
Master's Degrees by Department: 22

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 11; Geometry and Topology, 6; Analysis and Functional Analysis, 8. TOTAL: 25

| Fellowship (15) | $2400-3600$ | 9 or | None |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Teaching Assistantship (25) | $2850-3000$ | 9 | None | 20 | Teaching |
| Research Assistantship (5) | $3000-3600$ | 9 or | None | 20 | Research |
| Florida State University | 12 |  |  |  |  |

TALLAHASSEE, FLORIDA 32306
E.P. Miles, Jr, Director

Computing Center
Applications must be filed by March 1, 1970

| Teaching Assistantship (4) | $3800-4300$ | 12 | 6 | 20 |
| :--- | :--- | :--- | :--- | :--- |
| Research Assistantship (6) | $3800-4300$ | 12 |  | 20 |

## Florida State University

TALLAHASSEE, FLORIDA 32306
Ralph A. Bradley, Head
Department of Statistics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3442
Baccalaureate Degrees by Department: 2
Master's Degrees by Department:

PH. D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 15 . TOTAL: 15

| Fellowship (26) * | $2400-2800$ | 12 | None |  | Teaching |
| :--- | :---: | ---: | :--- | :--- | :--- |
| Teaching Assistantship (4) | $2700-3150$ | 9 | $\$ 175 /$ qtr. | 20 | 20 |
| Research Assistantship (8) | $3600-4200$ | 12 | $\$ 175 /$ qtr. | Research |  |
|  |  |  |  |  |  |
| *Some fellowships and traineeships have additional dependents' allowances. |  |  |  |  |  |

## University of Florida

GAINESVILLE, FLORIDA 32601
A.R. Bednarek, Chairman

Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: Master's Degrees by Department:

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 4; Analysis and Functional Analysis, 1; Applied Mathematics, 1; Topological Algebra, 5. TOTAL: 11

| Fellowship (14) | $2400-3150$ | 12 | \$175/qtr. |  | Non-working |
| :--- | ---: | ---: | ---: | ---: | :--- |
| Teaching Fellowship (4) | $2400-3000$ | 12 | $\$ 175 /$ qtr. | Non-working |  |
| Teaching Assistantship (45) | $2574-3420$ | 9 | $\$ 175 /$ qtr. | $15-20$ | Teaching |

## University of Florida

GAINESVILLE, FLORIDA 32601
William Mendenhall, Chairman
Department of Statistics

NUMBER OF DEGREES AWARDED BY 1969
Baccalaureate Degrees by Institution: 3561
Baccalaureate Degrees by Department: 6
Master's Degrees by Department: 5

| Fellowship (2) (NSF) | $2400-2680$ | 12 | Yes |  |
| :---: | :---: | :---: | :---: | :---: |
| $(2)$ (G.S.) | $2700-3150$ | 9 | No | None |
| Teaching Assistantship (15) | $350-400 / \mathrm{mo} .9$ | No | 20 | None |
|  |  |  | 20 |  |
| Research Assistantship (3) | $350-400 /$ mo. 9 | No |  | Tutoring |
|  |  |  |  |  |

## University of Miami

CORAL GABLES, FLORIDA 33124
NUMBER OF DEGREES AWARDED IN 1969
Edwin N. Duda, Acting Chairman
Baccalaureate Degrees by Institution: 2151
Department of Mathematics
Baccalaureate Degrees by Department: 38
Applications must be filed by March 1, 1970
Master's Degrees by Department: 13
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2 ; Geometry and Topology, 3; Analysis and Functional Analysis, 1. TOTAL: 6

| Fellowship (15) | $2000-3000^{*}$ | 9 | Waived |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (40) | $2500-3000$ | 9 | Waived | 15 | Teaching |
| Research Assistantship (5) | $3150-4350$ | $9-12$ | Waived |  | Research |
| $*$ Excluding dependency allowances. |  |  |  |  |  |

## University of South Florida

TAMPA, FLORIDA 33620
Jogindar S. Ratti, Chairman
Department of Mathematics
Applications must be filed by April 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
2190
Baccalaureate Degrees by Department: 44
Master's Degrees by Department: 1
Teaching Assistantship (20) $2700-3600 \quad 9 \quad$ Yes $\quad 6 \mathrm{hrs}$.

## GEORGIA

## Emory University

ATLANTA, GEORGIA 30322
NUMBER OF DEGREES AWARDED IN 1969
Trevor Evans, Chairman
Department of Mathematics
Applications must be filed by August 18, 1970

Baccalaureate Degrees by Institution: 531
Baccalaureate Degrees by Department: 28
Master's Degrees by Department: 7

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 5; Geometry and Topology, 1; Analysis and Functional Analysis, 4; TOTAL: 10

| Fellowship (16) | $2000-2500$ | 9 or | Waived |
| :--- | :--- | :--- | :--- |
|  |  | 12 | Waived |

## Emory University

ATLANTA, GEORGIA 30322
W. Buell Evans, Acting Chairman

Department of Statistics and Biometry
Applications must be filed by February, 1970
PH. D. Degrees awarded during last three years by field of specialization: Probability and Statistics,1. TOTAL: 1

| Fellowship (5) | 2000 | 10 | $\$ 660 /$ qtr. |
| :--- | :--- | :--- | :--- |

## Georgia Institute of Technology

ATLANTA, GEORGIA 30332
NUMBER OF DEGREES AWARDED IN 1969
B. M. Drucker, Director

Baccalaureate Degrees by Institution: 1139
Baccalaureate Degrees by Department: 26
Master's Degrees by Department:
Department of Mathematics

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Geometry and Topology, 1; Applied Mathematics, 2. TOTAL: 4
Teaching Assistantship (20) $2150-4125 \quad 9 \quad \$ 405 \quad 5-10$

NSF Traineeship (3)

## Georgia Institute of Technology

ATLANTA, GEORGIA 30332
Vladimir Slamecka, Director
School of Information/Computer Science
Applications must be filed by April 15, 1970 for
Financial Aid March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1139
Master's Degrees by Department: 51

PH.D. Degrees awarded during last three years by field of specialization: TOTAL: 56

| Fellowship (5) | $2650-5000$ | 12 | Yes | None Required |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (8) <br> (pre-M.S.) | 8400 | 12 | Yes | $13^{*}$ |

## Georgia Southern College

STATESBORO, GEORGIA 30458
Earl Lavender, Acting Head
Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department:92542

| Research Assistantship (5) | $1900-2100$ | 9 | $\$ 90$ | 10 |
| :--- | :--- | :--- | :--- | :--- |

## Georgia State University

ATLANTA, GEORGIA 30303
NUMBER OF DEGREES AWARDED IN 1969
Jan List Boal, Head
Baccalaureate Degrees by Institution:
Department of Mathematics
Baccalaureate Degrees by Department: 73
Master's Degrees by Department:

| Teaching Assistantship (3) | $2200-2400$ | 9 | $\$ 7$ per qt. hr. | 10 |
| :--- | :--- | :--- | :--- | :--- | | Teaching one |
| :--- |
| course or |
| equivalent |

## University of Georgia

ATHENS, GEORGIA 30602
J. G. Horne, Head

NUMBER OF DEGREES AWARDED IN 1969

Department of Mathematics
Baccalaureate Degrees by Institution: 3269
Baccalaureate Degrees by Department: 78
Master's Degrees by Department:

PH.D. Degrees awarded during last three years of field of specialization: Algebra and Number Theory, 2; Geom etry and Topology, 9; Analysis and Functional Analysis, 1; Applied Mathematics, 1. TOTAL: 13

| Teaching Assistantship (30) | $2600-4000$ | 9 mo. | $\$ 159 /$ qtr. |  |
| :--- | :--- | :--- | :--- | :--- |
| Research Assistantship (15) | $2400-3200$ | $9 / 12$ | $\$ 159 /$ qtr. | 12 |

## West Georgia College

CARROLLTON, GEORGIA 30117
C.R. Pittman, Acting Head

Department of Mathematics

NUMBER OF DEGREES $\Lambda$ W $\Lambda$ RDED IN 1969
Baccalaureate Degrees by Institution: 432
Eaccalaureate Degrees by Department:

## HAWAII

## University of Hawaii

HONOLULU, HAWAII 96822
Herbert S. Bear, Jr., Chairman
Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1590
Baccalaureate Degrees by Department: 50
Master's Degrees by Department: 250

| Teaching Assistantship (15) | $3300-3800$ | 9 | exempt | 6 |
| :--- | :--- | :--- | :--- | :--- |
| Part-time Instructor (3) | $3800-5000$ | 9 | partly | 6 |

## IDAHO

## Idaho State University

POCATELLO, IDAHO 83201
John Hilzman, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970
NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 560
Baccalaureate Degrees by Department: 12
Master's Degrees by Department: 6
Teaching Assistantship (5) $\quad 2200-2300 \quad 9 \quad$ None $\quad 5 \quad$ Teaching

## University of Idaho

MOSCOW, IDAHO 83843
Howard E. Campbell, Head
Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department: 26
Master's Degrees by Department: 10

PH.D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 1. TOTAL: 1

| Teaching A ssistantship (13) | $2200-3000$ | 9 |  | 6 |
| :--- | :--- | :--- | :--- | :--- |

## Ph. D. PROGRAM AT HAWAII <br> STARTS SEPTEMBER, 1970 <br> T. A.'s $\$ 3300-\$ 3800$ <br> TUITION EXEMPT

A number of half-time instructorships are available for suitably qualified advanced Ph. D. candidates:

$$
\$ 3,800-\$ 5,000
$$

WRITE: Department of Mathematics
University of Hawaii
Honolulu, Hawaii 96822

## ILLINOIS

## Bradley University

PEORIA, ILLINOIS 61606

Marvin G. Moore, Head
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1000
Baccalaureate Degrees by Department: 20

| Teaching Assistantship (2) | 2100 | 9 | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- |

## Chicago State College

CHICAGO, ILLINOIS 60621
F. Lane Hardy, Chairman

Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 658
Baccalaureate Degrees by Department: 22
Master's Degrees by Department: 10

| Teaching Assistantship (2) | $3000-6000$ | 10 | Waived | Full 30 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Half 15 | Tutoring |  |  |

## DePaul University

CHICAGO, ILLINOIS 60614
Michael Wichman, Acting Chairman
Department of Mathematics
Applications must be filed by

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1022
Baccalaureate Degrees by Department: 37
Master's Degrees by Department: 8
Teaching Assistantship (2) $2200 \quad 9 \quad 20$

## Eastern Illinois University

CARLESTON, ILLINOIS
NUMBER OF DEGREES AWARDED IN 19C3
A.J. DiPietro, Chairman

Department of Mathematics
Applications must be filed by March 15, 1970
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department: 80
Master's Degrees by Department: $7^{\circ}$

| Teaching Assistantship (2) | 3600 | 9 | $\$ 65 /$ qtr. | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Scholarship (3) | 1870 | 12 |  | $4-8$ | Teaching |
| Other (10) |  |  |  |  |  |
|  | $3100-5000$ | 12 | 12 | Miscellaneous |  |
| Graduate Assistant (5) | 3100 | 12 |  |  |  |

* Participants in the Specialist in College Teaching degree program.


## Illinois Institute of Technology

CHICAGO, ILLINOIS 60616
Haim Reingold, Chairman
Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department: 59
Master's Degrees by Department: 16

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 5; Geometry and Topology, 2; Analysis and Functional Analysis, 8; Probability and Statistics, 2; Applied Mathematics, 5. TOTAL: 22

| Fellowship (18) | 3600 | 12 |  |  |
| :--- | :--- | ---: | :--- | :--- |
| Teaching Assistantship (40) | 2700 | 9 | $6-7$ | Teaching |
| Research Assistantship (3) | 3600 | 12 |  |  |

## Illinois Institute of Technology

CHICAGO, ILLINOIS 60616
NUMBER OF DEGREES AWARDED IN 1969
Peter G. Lykos, Acting Head
Baccalaureate Degrees by Institution:
Information Science Center
Applications must be filed by February 1, 1970

| Fellowship (2) | 2400 | 9 | 20 | Research |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (10) | 2400 | 9 | 20 | Teaching |
| Research Assistantship (2) | 2400 | 9 | 20 | Research |

## Illinois State University

NORMAL, ILLINOIS 61761
Clyde T. Mc Cormick, Head
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1684
Baccalaureate Degrees by Department: 116
Master's Degrees by Department: 24

| Teaching Fellowship (4) | 3600 | 9 | $6-7$ |
| :--- | :--- | :--- | :--- |
| Teaching Assistantship (25) | 2160 | 9 | 10 |

## Northeastern Illinois State College

CHICAGO, ILLINOIS 60625
Louis M. Weiner, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 674
Baccalaureate Degrees by Department: 45
Master's Degrees by Department: 49

## Northern Illinois University

DE KALB, ILLINOIS 60115
Donald R. Ostberg, Head
Department of Mathematics
Applications must be filed by July 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3067
Baccalaureate Degrees by Department: 113
Master's Degrees by Department: 22

| Teaching Assistantship (30) | $2340-2880$ | 9 | 12 | 6 |
| :--- | :---: | :---: | ---: | :--- |
| Summer Assistantship (17) | 520 | 2 | 6 | 3 |

## Northwestern University

EVA NSTON, ILLINOIS 60201
NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1204
Ralph P. Boas, Chairman
Baccalaureate Degrees by Department: 32
Master's Degrees by Department: 46
Applications must be filed by February 1, 1970
PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 7; Geometry and Topology, 3; Analysis and Functional Analysis, 6; Probability and Statistics, 1; Applied Mathematics, 2. TOTAL: 19

| $\$ 1590-1800$ | $4-8$ |
| :--- | :--- |
| $\$ 1800$ |  |
| $\$ 1590-1800$ | $4-8$ |
| $\$ 1800$ |  |

## Southern Illinois University

CARBONDALE, ILLINOIS 62901
John M. H. Olmsted, Chairman
Applications must be filed by February 1, 1970; late applicants will be considered for 1970-71 vacancies occuring after May 1.

N UMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2300
Baccalaureate Degrees by Department: 74 Master's Degrees by Department: 2574

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, Analysis and Functional Analysis, 1. TOTAL: 2

| Fellowship (3) | $2250-2700$ | 9 | $\$ 5-25$ fees |  | Teaching |
| :--- | ---: | ---: | ---: | ---: | :--- |
| Teaching Assistantship (45) | $2610-3240$ | 9 | $\$ 5-25$ fees | $6-7$ | Traineeship (4) |
| NSF + NASA Train | $2400-3400$ | 12 | $\$ 5-25$ fees |  |  |

## Southern Illinois University

EDWARDSVILLE, ILLINOIS 62025
Robert N. Pendergrass, Chairman
Faculty of Mathematical Studies
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 989
Baccalaureate Degrees by Department: 51
Master's Degrees by Department: 8

| Fellowship (2) | $2250-2700$ | 9 |  |  |
| :--- | ---: | ---: | ---: | :--- |
| Teaching Assistantship (24) | $2700-3600$ | 9 | 16 | Teaching |
| Research Assistantship (2) | $2250-2700$ | -9 | 16 | Research |

Scholarship (4)

## University of Chicago

CHICAGO, ILLINOIS 60637
Richard K. Lashof, Chairman
NUMBER OF DEGREES AWARDED IN 1969
Department of Mathematics
Baccalaureate Degrees by Institution:
Applications must be filed by January 1, 1970 for
Baccalaureate Degrees by Department:28
foreign. February 1, 1970 for U.S. and Canadian
Master's Degrees by Department:
18

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 29; Geometry and Topology, 13; Analysis and Functional Analysis, 15; Applied Mathematics, 2. TOTAL: 59

| University Fellowship (10) | 1800 | 9 or 12 | None |
| :--- | :--- | :--- | :--- |
| Teaching Assistantship (10) | 2400 |  | 5 |
| Research Assistantship (20) | 2400 | 12 | variable research |
| Federal (35) | 2250 | 12 |  |
| Misc. (10) |  | 9 or 12 |  |

## University of Chicago

CHICAGO, ILLINOIS 60637
Robert L. Ashenhurst, Chairman
NUMBER OF DEGREES AWARDED IN 1969

Department of Information Sciences
Applications must be filed by February 1, 1970

| Fellowship (8) | 1800-2550 | either |  |  |
| :--- | :--- | :--- | ---: | :--- |
| Teaching Assistantship (4) | $300 / \mathrm{mo}$. | 9 | 6 | Teaching |
| Research Assistantship (17) | $410 / \mathrm{mo}$. | 9 | $\$ 310(1 \mathrm{cs})$ | up to 20 |

## University of Chicago

UHICAGO, ILLINOIS 60637
Williams H. Kruskal, Chairman
NUMBER OF DEGREES AWARDED IN 1969
Department of Statistics
Baccalaureate Degrees by Institution: 476
Baccalaureate Degrees by Department: 4
Applications must be filed by February 1, 1970
Master's Degrees by Department: 4
PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 7. TOTAL: 7

| Fellowship (19) | $1800-5000$ | 9 | 5 | Research |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (5) | $1800-2700$ | 9 | 5 | Teaching |
| Research Assistantship (5) | $1800-2700$ | 9 | 5 | Research |

## University of Illinois

URBANA, ILLINOIS 61801
Paul T. Bateman, Head
Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 4710
Baccalaureate Degrees by Department: 175
Master's Degrees by Department: 146

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 19; Geometry and Topology ,8; Logic and Sets, 5; Analysis and Functional Analysis, 23; Probability and Statistics, 7; Computer Science and Numerical Analysis,1; Applied Mathematics ,8. TOTAL: 71

| Fellowship | $2400-3000$ | 12 |  | Teaching |
| :--- | :--- | ---: | ---: | :--- |
| Teaching Fellowship (40) | $3000-3500$ | 12 | 2 | 6 |
| Teaching Assistantship (130) | 2900 | 9 | 15 | for half-time |
| Research Assistantship (15) | 2900 | 9 |  | for half-time |
| Tuition waiver (5) |  | 12 | None |  |

## University of Illinois

URBANA, ILLINOIS 61801
John R. Pasta, Chairman
Department of Computer Science
Applications must be filed by February 15, 1970
PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 2. TOTAL: 2

| Fellowship (10) | $2000-2400$ | 9 |  |
| :--- | ---: | ---: | ---: |
| Teaching Assistantship (10) | $2500-3400$ | 11 | 20 |
| Research Assistantship (20) | $2880-3780$ | 9 | 20 |

## University of Illinois at Chicago Circle

CHICAGO, ILLINOIS 60680
Joseph Landin, Head
Department of Mathematics
Applications must be field by February 1, 1970
(fellowships). September 1, 1970 (ass'tships)

NUMBEK OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution
Baccalaureate Degrees by Departnient:
Master's Degrees by Department:

| Fellowship (6) | $2400-3200$ | $9 \& 12$ | incl. |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (70) | $3150-3300$ | 9 | incl. | Teaching |  |
| Research Assistantship (4) | 3500 | 9 | incl. | Research |  |
| Scholarship (5) | Tuition | 9 | incl. |  |  |

## Western Illinois University

MACOMB, ILLINOIS 61455
Joseph B. Harkin, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1800
Baccalaureate Degrees by Department: 70 Master's Degrees by Department: 7

| Fellowship (2) | 2400 | 12 | 12 | Tutoring |
| :--- | :---: | :---: | :---: | :---: |
| Teaching Assistantship (10) | 2430 | 9 |  |  |
|  |  | INDTANA |  |  |

## Ball State University

MUNCIE, INDIANA, 47306
Earl H. McKinney, Head
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2081
Baccalaureate Degrees by Department: 69
Master's Degrees by Department: 28

| Teaching Assistantship (8) | $2500-2800$ | 9 | $\$ 340 / \mathrm{yr}$ | $15-20$ | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Indiana University

BLOOMINGTON, INDIANA 47401
George Springer, Chairman
Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 4610
Baccalaureate Degrees by Department: 59
Master's Degrees by Department: 38

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 7; Geometry and Topology, 2; Analysis and Functional Analysis, 11; Probability and Statistics, 1; Computer Science and Numerical Analysis, 1. TOTAL: 22

| Fellowship (25) | $2000-3200$ | $9 \& 12$ | $*$ |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Teaching Fellowship (10) | $3000-3600$ | $9 \& 12$ | $*$ | 3 | Teaching |
| Teaching Assistantship (130) | $2700-3600$ | $9 \& 12$ | $\$ 73 / \mathrm{sem}$. | 5 | Teaching |
| Research Assistantship (10) | $2900-3600$ | $9 \& 12$ | $\$ 73 / \mathrm{sem}$. | 15 | Research |
| Part-time Assistantship (10) | $600-1800$ | varies | $\$ 73 /$ sem. | varies | Assisting |
| Academic Year Institute (13) | 2850 | 9 | $\$ 73 /$ sem. | varies | $* * *$ |
| Summer Fellowships (20) | 600 | $8 w k s$. |  | $* *$ |  |

[^1]of financial assistance (with Amount 9 or number anticipated in 1970-1971) (dollars) 12 mo .

TUITION
if not included
in stipend $\mathrm{Hrs} /$ Week

## Indiana State University

TERRE HAUTE, INDIANA 47809
Vesper D. Moore, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2760
Baccalaureate Degrees by Department: 137
Master's Degrees by Department: 27

| Teaching Fellowship (4) | $2200-2500$ | 9 | 20 | Teaching \& Res. |
| :--- | :---: | :---: | :---: | :---: |
| Research Assistantship (12) | $1800-2200$ | 9 | 20 | Research |
| Summer Fellowships (6) | 500 | 10 wks. |  | 15 |

## Purdue University

LAFAYETTE, INDIANA 47907
NUMBER OF DEGREES AWARDED IN 1969
M. Jerison, Head
Division of Mathematical Sciences

Baccalaureate Degrees by Institution: 3433
Applications for assistantships must be filed by
March 15, 1970 and for fellowships by February 1, 1970

Baccalaureate Degrees by Department: 153
Master's Degrees by Department: 93

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 11; Geometry and Topology, 1; Logic, 2; Analysis and Functional Analysis, 15; Probability and Statistics, 3; Applied Mathematics, 11. TOTAL: 43

| Fellowship (20) | $2400-4000$ | 9 or | 12 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (110) | $2800-3500$ | 9 | $\$ 120$ | 6 | Teaching |
| Research Assistantship (15) | $2200-3500$ | 9 | $\$ 120$ |  | Research |

## Purdue University

LAFAYETTE, INDIANA 47906
NUMBER OF DEGREES AWARDED IN 1969
s. D. Conte, Head

Baccalaureate Degrees by Institution: 3433
Baccalaureate Degrees by Department:46

Department of Computer Science
Applications must be filed by March 15, 1970
PH. D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 20. TOTAL: 20

| Fellowship (8) | $2400-4000$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (28) | $2800-3400$ | 9 | $\$ 60$ | 20 |
| Research Assistantship (28) | $2800-3600$ | 9 | $\$ 60$ | 20 |

## Purdue University

LAFAYETTE, INDIANA 47907
NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3713
Master's Degrees by Department: 17
Department of Statistics
Applications must be filed by February 1970
PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 18. TOTAL: 1

| Fellowship (6) | 2400-2800 | 12 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Teaching Assistantship (35) | 2800-3300 | 10 | \$120 | 20 | Teaching |
| Research Assistantship (10) | 2500-3000 | 10 | \$120 | 20 | Research |
| Scholarship (4) * | See below * |  |  |  |  |
| Other (1) ** | ** |  |  |  |  |

## TUITION

9 or
if not included
SERVICE REQUIRED
number anticipated in 1970-1971)

## University of Notre Dame

NOTRE DAME, INDIANA 46556
O. Timothy O'Meara, Chairman

Department of Mathematics
Applications must be filed by February 20, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1477
Baccalaureate Degrees by Department: 15
Master's Degrees by Department: 51

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 12; Geometry and Topology ,4; Logic, 5; Analysis and Functional Analysis, 2. TOTAL: 23

| Fellowship (6) | 3360 | 12 |  | Teaching |
| :--- | :--- | ---: | :--- | :--- |
| Teaching Fellowship (6) | 4560 | 12 | 2 | Teaching |
| Teaching Assistantship (40) | $2400-3000$ | 9 | 4 |  |
| NSF (T)* NDEA (12) |  |  |  |  |
| Summer Support (32) | $2400-2800$ | 12 | $0-6$ | Teaching |

*These may be supplemented with half-time Teaching Assistantships-additional stipend $\$ 1000$.

## IOWA

## Drake University

DES MOINES, IOWA 50311
B. E. Gillam, Head

Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1278
Baccalaureate Degrees by Department: 13

## Iowa State University

AMES, IOWA 50010
Wilfred E. Barnes, Head
Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2448
Baccalaureate Degrees by Department: 57
Master's Degrees by Department:

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Geometry and Topology, 5; Analysis and Functional Analysis, 7; Computer Science and Numerical Analysis, 10; Applied Mathematics, 1. TOTAL: 20

| Fellowship (6) | $2400-2800$ |  |  |  | None |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (60) | $2700-3150$ | 9 | $\$ 105 /$ qtr. | 6 | Teaching |
| Research Assistantship (4) | $2700-3300$ | $9-12$ | $\$ 105 /$ qtr. |  | Research |

## Iowa State University

AMES, IOWA 50010
Robert M. Stewart, Chairman
Department of Computer Science
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2448
Baccalaureate Degrees by Department: 13
Master's Degrees by Department: 13

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6 ; Geometry and Topology, 5; Analysis and Functional Analysis, 7; Computer Science and Numerical Analysis, 10 ; Applied Mathematics, 1. TOTAL : 29

| Fellowship (4) | 12 | None |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (20) | 11 | $\$ 105 /$ qtr. | $3-6$ | Teaching Contact Hrs. |
| Research Assistantship (15) | 11 | $\$ 105 /$ qtr. | 20 | Research |

TYPE
of financial assistance (with number anticipated in 1970-1971)

STIPEND
Amount 9 or
(dollars) 12 mo .

TUITION
if not included SER vICE REQURFED
in stipend Hrs/Wee': Tyre

## Iowa State University

AMES, IOWA 50010
T.A. Bancroft, Head

Department of Statistics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2448
Baccalaureate Degrees by Department: 13
Master's Degrees by Department: 14

PH. D. Degrees awarded during last three years by field of specilization: Probability and Statistics, 24. TOTAL: 24

| Fellowship (8) | $2400-2800$ | 12 |  |  |  |
| :--- | ---: | ---: | ---: | ---: | :--- |
| Teaching Assistantship (10) | $2655-2835$ | 9 | $\$ 105$ | 22 | Teaching |
| Research Assistantship (12) | $2655-2835$ | 9 | $\$ 105$ | 22 | Research or Consulting |
| Traineeships (NIH) (6) | $2400-2800$ | 12 |  |  |  |

## University of Iowa

IOWA CITY, IOWA 52240
Robert H. Oehmke, Chairman
NUMBER OF DEGREES AWARDED IN 1969
Department of Mathematics
Baccalaureate Degrees by Institution: 2476
Baccalaureate Degrees by Department: 79
Applications must be filed by February 1, 1970
Master's Degrees by Department: 16
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 8 ; Geometry and Topology, 3; Analysis and Functional Analysis, 10. TOTAL: 21

| Fellowship (8) | $2400-3000$ | 9 |  |  |
| :--- | :--- | :---: | :--- | :--- |
| Teaching Fellowship (6) | 3600 | 12 | 20 |  |
| Teaching Assistantship (50) | $2750-3300$ | 9 | $\$ 710$ | 20 |

## University of Iowa

IOWA CITY, IOWA 52240
Arthur C. Fleck, Acting Chairman
Department of Computer Science
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2476
Baccalaureate Degrees by Department: 79
Master's Degrees by Department: 6

PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 3. TOTAL: 3

## University of Iowa

IOWA CITY, IOWA 52240
Robert V. Hogg, Chairman
Department of Statistics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2476
Baccalaureate Degrees by Department: 79
Master's Degrees by Department: 13

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 11. TOTAL: 11

| Fellowship (6) | $2400-3000$ | 12 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (4) | 3600 | 12 |  |  |  |
|  |  |  |  | Research |  |
| Teaching Assistantship (10) | $2750-3300$ | 9 | $\$ 710$ | 20 | Teaching |
| Research Assistantship (7) | $2750-3300$ | 9 | $\$ 710$ | 20 | Teaching |

## KANSAS

## Fort Hays Kansas State College

HAYS, KANSȦS 67601
Wilmont Toalson, Adviser
Department of Mathematics
Applications must be filed by March 1, 1970.

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees Institution: 1160
Baccalaureate Degrees by Department: 66
Master's Degrees by Department: 8

| Fellowship (2) | 500 | 9 | $\$ 121.50$ | 12 |
| :--- | ---: | ---: | ---: | ---: |
| Teaching Assistantship (2) | 1800 | 9 | $\$ 121.50$ | 20 |

## Kansas State College of Pittsburg

PITTSBURG, KANSAS 66762
Helen F. Kriegsman, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1050
Baccalaureate Degrees by Department: 52
Master's Degrees by Department: 20

## Kansas State University

MANHATTAN, KANSAS 66502
John E. Maxfield, Head
Department of Mathematics
Applications must be filed for fellowships by February
15, 1970 for assistantships anytime.

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 3 . TOTAL: 3

| Teaching Fellowship (5) | $2340-3500$ | either | $\$ 147$ | 4 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (22) | $2340-3500$ | either | $\$ 147$ | 4 | Teaching |
| Research Assistantship (5) | $2340-3500$ | either | $\$ 147$ | 4 | Teaching |

## University of Kansas

LAWRENCE , KANSAS 66044
G. Baley Price, Chairman

Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2611
Baccalaureate Degrees by Department: 71
Master's Degrees by Department: 23

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 12; Geometry and Topology , 6; Analysis and Functional Analysis, 6. TOTAL: 24

| Fellowship (8) | $2400-2800$ | 12 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (1) | $2600-3200$ | 9 |  | Teaching |  |
| Teaching Assistantship (72) | $2600-3200$ | 9 | $\$ 18 \mathrm{sem} . \mathrm{hr}$. | $5-6$ | Teaching |
| Research Assistantship (2) | $2200-2900$ | 9 | $\$ 18 \mathrm{sem} . \mathrm{hr}$. | 20 | Research |
|  |  |  |  |  |  |
| Fees during 1970-1971 are expected to be approximately $\$ 18$ per semester hour of credit earned. Graduate |  |  |  |  |  |
| students usually enroll in 6 or 9 semester hours of courses each semester. |  |  |  |  |  |

## Wichita State University

WICHITA, KANSAS 67208
William M. Perel, Chairman
NUMBER OF DEGREES AWARDED IN 1969
Department of Mathematics
Baccalaureate Degrees by Institution: 1143
Applications must be filed by February 15, 1970
Baccalaureate Degrees by Department: 39
Master's Degrees by Department: 10

## KENTUCKY

## Eastern Kentucky University

RICHMOND, KENTUCKY 40475
Bennie R. Lane, Chairman
Department of Máthematics
Applications must be filed by April 15, 1970

NUMBER OF DEGIREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1774
Baccalaureate Degrees by Department: 42

| Teaching Assistantship (3) | 2200 | 9 | $\$ 200$ | 3 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Morehead State University

MOREHEAD, KENTUCKY 40351
Billy R. Nail, Chairman
Division of Mathematical Sciences
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department: 30

| Teaching Assistantship (4) | 2200 | 9 | In-state | 20 | Assisting Faculty <br> Member |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Murray State University

MURRAY, KENTUCKY 42071
Harold G. Robertson, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1314
Baccalaureate Degrees by Department: 57
Teaching Assistantship (6) $2000-2700 \quad 9 \quad \$ 120 \quad 12-20 \quad 1$ or 2 Courses


## LOUISIANA POLYTECHNIC INSTITUTE

The Mathematics Department of Lovisiana Polytechnic Institute offers the B.S., M.S. and Ph.D. degrees.
The mathematics faculty, including Ph.D.'s in Analysis, Algebra, Geometry, Topology, Probability, and Statistics, is experienced, competent and personally interested in its students.

The Mathematics Department which is housed in a new building has a calculator laboratory furnished with new electronic desk calculators. Computer facilities consist of an IBM 1620 and an IBM 360.

Fifteen assistantships and part-time teaching jobs are available and range in pay from $\$ 1800$ to $\$ 3000$ for nine months. Apply by February 1 to W. B. Temple, Head, Department of Mathematics, Ruston, Louisiana, 71270.

## University of Kentucky

LEXINGTON, KENTUCKY 40506
NUMBER OF DEGREES AWARDED IN 1969
James H. Wells, Chairman
Department of Mathematics and Applied Mathematics
Baccalaureate Degrees by Institution: 2184
Baccalaureate Degrees by Department: 48
Applications for fellowships must be filed by February
1, 1970 and for assistantships by March 1, 1970

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Geometry and Topology, 8; Analysis and Functional Analysis, 14; Applied Mathematics, 2. TOTAL: 25

| Fellowship (10) | $2400-3600$ | 12 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (55) | $2800-3200$ | 10 | $\$ 140$ | 18 | $5-6$ |
| Research Assistantship (24) | $2600-2800$ | 10 | $\$ 140$ |  |  |

## University of Kentucky

LEXINGTON, KENTUCKY 40506
R. L. Anderson, Chairman

Department of Statistics
Applications for assistantships must be filed by
April 1, 1970 and for fellowships by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2184

| Fellowship (2) | 2400 | 9 | $*$ |  |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Teaching Assistantship (8) | $2800-3400$ | 9 | $*$ | 15 | Teaching |
| Research Assistantship (3) | 3600 | 12 | $*$ | 20 | Research |
|  |  |  |  |  |  |
| *Waiver of Out-of-State fees. |  |  |  |  |  |

## University of Louisville

LOUISVILLE, KENTUCKY 40208
Roger H. Geeslin, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department: 35
Master's Degrees by Department: 4

| Teaching Assistantship(6) | $2750-2950$ | 9 | waived | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Western Kentucky University

BOWLING GREEN, KENTUCKY 42101
NUMBER OF DEGREES AWARDED IN 1969
Robert C. Bueker, Chairman
Baccalaureate Degrees by Institution: 1342
Department of Mathematics
Applications must be filed by March 15, 1970
Baccalaureate Degrees by Department: 42

| Teaching Assistantship (8) | $2000-2900$ | 9 | $\$ 12 / \mathrm{hr}$ | 8 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

## LOUISIANA

## Francis T. Nicholls State College

THIBODAUX, LOUISIANA 70301
M. M. Ohmer, Chairman

Department of Mathematics
Applications must be filed by February 28, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 370
Baccalaureate Degrees by Department: 3

## Louisiana Polytechnic Institute

RUSTON, LOUISIANA 71270
NUMBER OF DEGREES AWARDED IN 1969
W. B. Temple, Head

Department of Mathematics
Applications must be filed by February 15, 1970

Baccalaureate Degrees by Institution: 1302
Baccalaureate Degrees by Department: 12
Master's Degrees by Department: 6

| Teaching Assistantship (20) | $1800-3000$ | 9 | Waived | $2-6$ |
| :--- | :--- | :--- | :--- | :--- |

## Louisiana State University

BATON ROUGE, LOUISIANA 70803
NUMBER OF DEGREES AWARDED IN 1969
L.I. Wade, Chairman

Department of Mathematics
Applications must be filed by March 15, 1970
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department: 35
Master's Degrees by Department:
PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 13; Geometry and Topology, 6; Analysis and Functional Analysis, 8. TOTA L: 27

| Fellowship (15) | $2000-3600$ | 12 | $\$ 0-55 / \mathrm{sem}$. | None |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Teaching Assistantship (45) | $3600-4500$ | 12 | $\$ 55 /$ sem. | 6 | Teaching |
| Instructorship (5) | $6000-7000$ | 9 | $\$ 85 /$ sem. | 15 | Teaching. |

## Louisiana State University in New Orleans

NEW ORLEANS, LOUISIANA 70122
Prem. K. Kulshrestha, Acting Chairman
Department of Mathematics
Applications must be filed by April 30, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 584
Baccalaureate Degrees by Department: 22
Master's Degrees by Department:

| Teaching Assistantship (5) $2400-2600$ | 9 | $5-6$ | Teaching |
| :--- | :--- | :--- | :--- | :--- |

## McNeese State College

LAKE CHARLES, LOUISIANA 70601
Patrick L. Ford, Head
Department of Mathematical Sciences

| Teaching Assistantship (12) | 2400 | 9 | $\$ 20$ approx. | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Northeast Louisiana State College

MONROE, LOUISIANA 71201
Richard D. Finley, Head
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 770
Baccalaureate Degrees by Department: 20
Master's Degrees by Department: 9

| Teaching Assistantship (20) | 2400 | 9 | None | Teaching |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Lab. Asst. (4) | 2000 | 9 | None | $12-15$ |  |

TYPE
of financial assistance (with
number anticipated in 1970-1971) Amount 9 or

## Northwestern State College

NATCHITOCHES, LOUISIANA 71457
NUMBER OF DEGREES AWARDED IN 1969
Russell Whittington, Jr., Head
Department of Mathematics

TUITION
if not included SERVICE REQUIRED in stipend Hrs/Week Type

| Teaching Assistantship (10) | $600-2400$ | Waived for <br> out of state <br> students. No <br> tuition for instate |
| :--- | :--- | :--- | :--- |

## Southeastern Louisiana College

HAMMOND, LOUISIANA 70401
NUMBER OF DEGREES AWARDED IN 1969
Robert C. Brown, Head
Baccalaureate Degrees by Institution: 684
Department of Mathematics
Applications must be filed by March 15, 1970

| Teaching Assistantship (5) | 2400 | 9 | 51.50 each <br> semester | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Tulane University

NEW ORLEANS, LOUISLANA 70118
Paul S. Mostert, Chairman
Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 852
Baccalaureate Degrees by Department: 32
Master's Degrees by Department: 4

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 4; Geometry and Topology, 11; Analysis and Functional Analysis, 8. TOTAL: 23

| Fellowship (22) | $2400-3000$ | $9-12$ | Waived |  |  |
| :--- | :--- | :--- | :--- | ---: | :--- |
| Teaching Assistantship (12) | $2400-2800$ | 9 | Waived | 6 | Teaching |
| Research Assistantship (2) | 2600 | 9 | Waived | 10 | Research |
| Scholarship (2) |  |  |  |  |  |
| Exchange (1) | 9 | Waived | Waived | $0-4$ | Grading and/or |
| Teaching Apprenticeship (5) | 2400 |  |  | Teaching |  |

## University of Southwestern Louisiana

LAFAYETTE, LOUISIANA 70501
David R. Andrew, Head
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: . 1127
Baccalaureate Degrees by Department: 57
Master's Degrees by Department: 7
Teaching Assistantship (25) $2000-3000 \quad 9 \quad 6 \quad$ Teaching

## MAINE

## University of Maine

ORONO, MAINE 04473

NUMBER OF DEGREES AWARDED IN 1969
John C. Mairhuber, Chairman
Baccalaureate Degrees by Institution:
Department of Mathematics
Applications must be filed by February 15, 1970
Baccalaureate Degrees by Department: 63
Master's Degrees by Department: 10

| Teaching Assistantship (4) | $2300-2500$ |  |  | 6 |
| :--- | :--- | :--- | :--- | :--- |

## MARYLAND

## Johns Hopkins University

BALTIMORE, MARYLAND 21218
J. H. Sampson, Chairman

Department of $M$ athematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 389
Baccalaureate Degrees by Department: 11
Master's Degrees by Department: 3

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 3; Geometry and Topology, 1; Analysis and Functional Analysis, 4. TOTAL: 8

| Fellowship (6) | $2200-3500$ | 9 to 12 |
| :--- | ---: | :--- |
| Teaching Assistantship (27) * | $1900-2350$ | 9 |
| Research Assistantship (4) * | $600-2000$ | 9 to 12 |

* Teaching assistants can hold Research Assistantships.


## Johns Hopkins University

BALTIMORE, MARYLAND 21205
Alan Ross, Chairman
Department of Biostatistics
Applications must be filed by April 1970
PH. D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 6. TOTAL: 6

| Fellowship (17) | $2400-2800$ | 12 | yes |
| :--- | :--- | :--- | :--- |
| Scholarship (1) | 1800 | 12 | yes |

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics,6.TOTAL: 6.

## Morgan State College

BALTIMORE, MARYLAND 21212
Walter R. Talbot, Chairman
Department of Mathematics
Applications must be filed by January 20, 1970

## University of Maryland

COLLEGE PARK, MARYLAND 20742
NUMBER OF DEGREES AWARDED IN 1969
J.K. Goldhaber, Chairman

Baccalaureate Degrees by Institution: 4695
Baccalaureate Degrees by Department: 75
Master's Degrees by Department: 59

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Geometry and Topology, 3; Logic, 2; Analysis and Functional Analysis, 12; Probability and Statistics,4; Computer Science and Numerical Analysis, 1; Applied Mathematics, 18. TOTAL: 46

| Fellowship (35) | $2400-4000$ | $9-12$ | usually included; <br>  <br> Teaching Assistantship (125) | $2800-3000$ | 9 |
| :--- | ---: | :---: | :---: | :---: | :---: |

## University of Maryland

COLLEGE PARK, MARYLAND 20742
William F. Atchison, Chairman
Department of Computer Science
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 4695
Master's Degrees by Department:
3

| Teaching Assistantship (22) | $2800-3000$ | 9 |  | $4-6$ | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Research Assistantship (9) | $3400-3850$ | 9 |  |  |  |

## University of Maryland, Baltimore County

## Graduate Study in Mathematics Leading to M. A., M.S. and Ph.D. Degrees <br> - FIELDS -

Real \& Complex Analysis, Functional Analysis, Ordinary and Partial Differential Equations, Dynamical Systems, Control Theory, Fluid Dynamics, Numerical Analysis, Mathematical Physics.

- FELLOWSHIPS AND TEACHING ASSISTANTSHIPS At least $\$ 2,800$ with Remission of Fees.
- APPLY TO -

Dr. R. C. Roberts, Chairman
Division of Mathematics
University of Maryland Baltimore County
Baltimore, Maryland 21228

## UNIVERSITYOF MARYLAND

## Department of Mathematics

The Department of Mathematics offers strong programs leading to the M. A. and Ph. D. degrees in the fields of Algebra, Applied Mathematics, Real and Complex Function Theory, Functional Analysis, Geometry, Logic, Number Theory, Numerical Analysis, Probability, Statistics and Topology. The M. A. is offered under either a thesis or a non-thesis option.

The courses offered are numerous and varied. Approximately 115 graduate and advanced undergraduate courses are given each year. Many of these are selected topics courses. More than ten seminars meet regularly, and one or more weekly colloquia attract visiting mathematicians from all parts of the world.

Opportunities for financial aid are ample. Under a grant from the National Science Foundation, the Department of Mathematics now offers annually fifteen Graduate Fellowships at $\$ 3600$ to qualified beginning graduate students and eight Senior Fellowships at $\$ 4000$ to advanced students. Fellowships from various government agencies and private organizations, and research assistantships, as well as about 125 teaching assistantships, are also available.

## Institute for Fluid dynamics and applied Mathematics

Many students working for a degree in the area of applied mathematics find their thesis advisers from among the faculty of the Institute for Fluid dynamics and Applied Mathematics. The faculty of the Institute, while engaged primarily in research, teach many courses in the Mathematics Department and conduct various specialized seminars. The fields of applied mathematics in which the Institute is particularly well represented include partial differential equations, ordinary differential equations, control theory, numerical analysis, and approximation theory.

## Completer Science Center

As an independent academic unit of the University, the Center offers M. S. and Ph. D. degrees in Computer Science.

Specialization is possible in the areas of numerical analysis; theory of computability; automata theory; programming languages; systems programming; picture processing and pattern recognition; automation and simulation of computer design; information storage; retrieval and dissemination; and mathematical and computational linguistics.
The Center provides computing service for all academic activities at the University. Present computer equipment includes a UNIVAC 1108 and an IBM 7094 as well as low and high speed remote terminals distributed over the University's College Park, Baltimore and Catonsville campuses.

## SpECIAL EvENTS

Year in Several Complex Variables

- includes many related colloquia and seminars, culminating with: International Conference in Several Complex Variables

April 6-17, 1970
Year in Topological Dynamics
1970-71

- includes a large number of related meetings and seminars. International Conference on Approximation Theory and Related Topics

October 26-30, 1970
The University of Maryland campus is only 8 miles from downtown Washington, with its many cultural and scholarly institutions, such as the Library of Congress. In addition, the concentration of government and industry in the Washington-Baltimore area creates a considerable demand for skilled mathematicians and computer scientists.

See the University of Maryland's listings for further details on financial aid. For further information and application forms write to:

Graduate Committee
Department of Mathematics

## Admissions and Financial Awards Committee Computer Science Center

## University of Maryland, Baltimore County

BALTIMORE, MARYLAND 21228
Richard C. Roberts, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970
(February 1, 1970 for foreign students)

| Fellowship (4) | $2800-3000$ | 9 | $4-6$ | Teaching or |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (6) | 2800 | 9 | 4 |  |

## MASSACHUSETTS

## Boston College

CHESTNUT HILL, MASSACHUSETTS 02167
G.G. Bilodeau, Chairman

Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Department: 53
Master's Degrees by Department: 3

| Fellowship (1) | $2400-2600$ | 9 |  | Teaching |
| :--- | :--- | :--- | ---: | :--- |
| Teaching Fellowship (14) | $2400-2600$ | 9 | 6 | Varied |
| Teaching Assistantship (3) | 2200 | 9 | 12 |  |
| Scholarship (2) | tuition |  |  |  |

## Boston University

BOSTON, MASSACHUSETTS 02215
NUMBER OF DEGREES AWARDED BY 1969
Robin E. Esch, Chairman
Baccalaureate Degrees by Institution: 1000
Department of Mathematics
Baccalaureate Degrees by Department: 55
Applications must be filed by February 1, 1970
Master's Degrees by Department:

PH. D. Degrees awarded during last three years by field of specialization: Analysis and Functional Analysis, 1 ; Probability and Statistics, 1; Computer Science and Numerical Analysis, 3; Applied Mathematics 2. TOTAL: 7

| Fellowship (4) | $2400-3300$ | 9 |  |  |
| :--- | :--- | :--- | ---: | :--- |
| Teaching Fellowship (14) | 2800 | 9 | 6 | Teaching |
| Teaching Assistantship (2) |  | 9 | 15 | Miscellaneous |

## Brandeis University

WALTHAM, MASSACHUSETTS 02154
Hugo Rossi, Chairman
Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 539
Baccalaureate Degrees by Department: 14
Master's Degrees by Department: 15

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 8 ; Geometry and Topology, 4; Analysis and Functional Analysis, 6. TOTAL: 18

| Fellowship (18) | $2400-2600$ | 12 |  | 3 |
| :--- | :--- | ---: | :--- | :--- |
| Teaching Assistantship (19) | $1100-1400$ | 9 | Teaching |  |
| Research Assistantship (20) | $800-1700$ | 9 |  |  |
| Scholarship-Tuition (25) | 2275 |  |  |  |
| Mexican Government (1) | 3600 | 12 |  |  |
| NRC (1) |  | 12 |  |  |

## Clark University

WORCESTER, MASSACHUSETTS 01610

Zalman Rubinstein, Chairman
NUMBER OF DEGREES AWARDED IN 1969
Department of Mathematics
Applications must be filed by February 20, 1970

Baccalaureate Degrees by Institution: 293
Baccalaureate Degrees by Department: 19 Master's Degrees by Department: 3

PH. D. Degrees awarded during last three years by field of specialization: Category Theory, 2. TOTAL: 2

| Fellowship (4) | $2400-3400$ | 12 |  |
| :--- | :---: | :---: | :---: |
| Teaching Assistantship (6) | $2200-3000$ | 9 | Teaching |
| Research Assistantship (1) | $2200-3000$ | 9 |  |
| Scholarship (2) | 1000 | 9 | Half-time |
| Computer Fellowship (2) | 2500 | 9 | Full-time |

## Harvard University

CAMBRIDGE, MASSACHUSETTS 02138
NUMBER OF DEGREES AWARDED IN 1969
John T. Tate, Chairman
Baccalaureate Degrees. by Institution: 1500
Department of Mathematics
Applications must be filed by January 20, 1970
PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 13; Geometry and Topology, 9; Logic, 2; Analysis and Functional Analysis, 10; Applied Mathematics, 1. TOTAL: 35

| Teaching Fellowship (34) | $1375-1700$ | 9 | $\$ 600-2400^{*}$ | 3 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Research Assistantship (2) | varies |  |  | varies | Research |
| Scholarship (10) | $1000-4400$ | 9 | $\$ 600-2400$ |  |  |

*Teaching Fellows are eligible for Staff Tuition Scholarships which cover most tuition expenses.

## Harvard University

CAMBRIDGE, MASSACHUSETTS 02138
George Carrier, Chairman
Committee on Applied Mathematics
Applications must be filed by January 20, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1375
Baccalaureate Degrees by Department: 26
Master's Degrees by Department: 2

PH. D. Degrees awarded during last three years by field os specialization: Applied Mathematics,6. TOTAL: 6*

| Teaching Fellowship (50) | $1375-1750$ | 9 | Waived | $10-20$ |
| :--- | :--- | ---: | :--- | :--- |
| Teaching Assistantship (5) | 1000 | 9 | Varies | $10-20$ |
| Research Assistantship (100) | $1500-4200$ | 12 | Varies | $10-20$ |
| Scholarship (69) | up to 4500 | 9 | $\$ 2400$ |  |

* See note under the Division of Engineering and Applied Physics below.


## Harvard University

CAMBRIDGE, MASSACHUSETTS 02138
Harvey Brooks, Chairman
Division of Engineering and Applied Physics
Applications must be filed by January 20, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1375
Baccalaureate Degrees by Department: 13
Master's Degrees by Department: 53

PH. D. Degrees awarded during last three years by field of specialization: Logic,3; Computer Science and Numerical Analysis, 15; Applied Mathematics, 8; Control Theory, 5; Engineering and Applied Physics, 102. TOTAL: 133

NOTE: Students in Applied Mathematics may work either under the Committee on Applied Mathematics or the Division of Engineering and Applied Physics, the latter being more specialized. Assistantships and Fellowships listed above under the Committee apply also to the Division.

## Harvard University

CAMBRIDGE, MASSACHUSETTS 02138
Arthur P. Dempster, Chairman
Department of Statistics
Applications must be filed by December 15, 1969

NUM13ER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1375
Baccalaureate Degrees by Department: 1
Master's Degrees by Department: 2

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 15. TOTAL: 15

| Fellowship (13) | $2000-4000$ | 9 |  | Teaching |
| :--- | :---: | :---: | :---: | :---: |
| Teaching Fellowship (7) | $550-700$ | 5 | 10 | Research |
| Research Assistantship (5) | variable | 5 |  |  |

Other (6)

## Massachusetts Institute of Technology

CAMBRIDGE, MASSACHUSETTS 02139
Norman Levinson, Chairman
Department of Mathematics
Applications must be filed by January 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 808
Baccalaureate Degrees by Department: 70
Master's Degrees by Department: 10

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Geometry and Topology, 12; Logic, 10; Analysis and Functional Analysis, 14; Computer Science and Numerical Analysis, 4; Applied Mathematics, 7; Operations Research,2; Probability, 1; Combinatorial Analysis, 1. TOTAL: 57

| Fellowship (46) | $1800-2800$ | 9 | Scholarship |  |
| :--- | :--- | ---: | :--- | :--- |
| Half-time Teaching <br> Assistantship (30) | $2400-2800$ | 12 |  |  |
|  |  |  |  |  |
| Full-time Teaching | 3762 | 9 | Scholarship |  |
| Assistantship (16) |  |  | Scholarship | 30 |
| Research Assistantship (14) <br> Traineeship (11) | 4608 | 9 | $\$ 2150$ | 16 |
|  | $1800-2100$ | 9 | Scholarship |  |
|  | $2400-2800$ | 12 |  |  |

## Southeastern Massachusetts University

NORTH DARTMOUTH, MASSACHUSETTS 02747
Fred Wolock, Chairman
Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department:
Teaching Assistantship (4) $\quad 3000 \quad$ Fees $\quad 9 \quad 6 \quad$ Teaching

## Tufts University

MEDFORD, MASSA CHUSETTS 02155
James W. Schlesinger, Chairman
Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 779
Baccalaureate Degrees by Department: 34
Master's Degrees by Department:
1

| Teaching Assistantship (3) | Tuition +1200 | 9 | 3 | Teaching |
| :--- | :--- | ---: | ---: | ---: |
| Scholarship (5) | Tuition | 9 |  |  |
| NSF Traineeship (1) | $2400-2800$ | 12 | 3 | Teaching |

TYPE
of financial assistance (with number anticigas in 1970-d971) $\cdots$

## University of Massachusetts

AMHERST, MASSACHUSETTS 01002
W. L. Strother, Chairman

Department of Mathematics and Statistics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2622
Baccalaureate Degrees by Department: 78
Master's Degrees by Department: 12

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Geometry and Topology,2; Analysis and Functional Analysis, 2. TOTAL: 10

| Fellowship (10) | 2600 | $9 * *$ | $3-6$ | Teaching |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (20)* | $3000-3600$ | $9 * *$ | 6 | Teaching |
| Teaching Assistantship (40) | $2700-3000$ | $9 * *$ |  |  |
| $*$ includes 15 lecturerships ( for students with M. A. only) |  |  |  |  |
| $* *$ occasionally some summer employment is available at extra compensation. |  |  |  |  |

## Worcester Polytechnic Institute

WORCESTER, MASSACHUSETTS 01609
John P. van Alstyne, Acting Head
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 315
Baccalaureate Degrees by Department: 27

| Teaching Assistantship (5) | 2400 | 9 | Remitted | 20 |
| :--- | :--- | :--- | :--- | :--- | | Teaching, Tutoring, |
| :--- |
| Paper Grading, Etc. |

## MICHIGAN

## Andrews University

BERRIEN SPRINGS, MICHIGAN 49104
Edward J. Specht, Chairman
Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 281
Baccalaureate Degrees by Department: $\quad 7$
Master's Degrees by Department: 4
Teaching Assistantship (4) $\quad 2100-2500 \quad 10 \quad \$ 660 \quad 10 \quad$ Teaching

## Eastern Michigan University

Robert S. Pate, Head
UMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1987
Department of Mathematics
Baccalaureate Degrees by Department: 55
Master's Degrees by Department: 12

TYPE
of financial assistance (with number anticipated in 1970-1971)

TUITION
if not included SERVICE REQUIRED Amount 9 or (dollars) 12 mo .
in stipend Firs/Week Type

## Michigan State University

EAST LANSING, MICHIGAN 48823
NUMBER OF DEGREES AWARDED IN 1969
Charles P. Wells, Chairman
Baccalaureate Degrees by Institution:
Department of Mathematics
Baccalaureate Degrees by Department: 155
Applications must be filed by February 15, 1970
Master's Degrees by Department:
PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 10; Geometry and Topology, 16; Analysis and Functional Analysis, 3; Computer Science and Numerical Analysis, 4 ; Applied Mathematics, 1. TOTAL: 34

| Fellowship (20) | $1800-2800$ | 9 or 12 |  | None | None |  |
| :--- | ---: | ---: | ---: | ---: | :--- | :--- |
|  |  |  |  |  |  |  |
| Teaching Assistantship (105) | $2700-3100$ | 9 | $13 / \mathrm{cr}$. | $\$ 13 / \mathrm{cr}$. | $4-6$ | Teaching |
| Research Assistantship (13) | $3500-3800$ | 12 |  |  | $2-3$ | Teaching/Research |
| Scholarship (7) | 500 | 9 | $13 / \mathrm{cr}$. | $\$ 13 / \mathrm{cr}$. | None | None |

## Michigan State University

EAST LANSING, MICHIGAN 48823
Harry G. Hedges, Chairman
NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 6505
Department of Computer Science
Baccalaureate Degrees by Department: 21
Applications must be filed by March 1, 1970
PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 3. TOTAL: 3

| Fellowship (4) | 3000 | 12 |  |  |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Teaching Assistantship (10) | $2800-3100$ | 9 | $13 / \mathrm{cr} . \$ 13 / \mathrm{cr}$. | 20 | Teaching/Consulting |
| Research Assistantship (5) | $2800-3100$ | 9 | $13 / \mathrm{cr} \cdot \$ 13 / \mathrm{cr}$. | 20 | Research/ |
|  |  |  |  |  | Programming |

## Michigan State University

EAST LANSING, MICHIGAN 48823
James Stapleton, Chairman
Department of Statistics and Probability
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Instituticn: 6505
Master's Degrees by Department:

PH. Degrees awarded during last three years by field of specialization: Probability and Statistics, 5. TOTAL: 5

| Fellowship (13) | 2400 | 12 |  |  |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Teaching Assistantship (23) | $2790-3150$ | 9 | $\$ 13 / \mathrm{cr}$. | 4 | Thesis Research |

## Michigan Technological University

HOUGHTON, MICHIGAN 49931
H. L. Hunzeker, Head

Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Department: 16
Master's Degrees by Department:

## Northern Michigan University

MARQUETTE, MICHIGAN 49855
Donald D. Heikkinen, Head
Department of Mathematics.
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1845
Baccalaureate Degrees by Department: 50
Master's Degrees by Department: 15

| Teaching Assistantship (6) | $2400-2600$ | 9 | Tuition | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Tutorial Assistant (3) | $5500-5800$ | 9 |  | 12 | Teaching or Research |

## Oakland University

ROCHESTER, MICHIGAN 48063
G. Philip Johnson, Chairman

Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 569
Baccalaureate Degrees by Department: 35
Master's Degrees by Department: 5

| Teaching Assistantship (8) | 2700 approx. | 8 | $\$ 2700$ approx. | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

* May be waived in certain cases.


## University of Detroit

DETROIT, MICHIGAN 48221
Karl W. Folley, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREFS AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department: 45
Master's Degrees by Department: 36

| Teaching Fellowship (15) | $1800-2400$ | 9 | 20 |
| :--- | :--- | :--- | :--- |

## University of Michigan

ANN ARBOR, MICHIGAN 48104
William J. Leveque, Chai rman
Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 4695
Baccalaureate Degrees by Department: 143
Master's Degrees by Department: 90

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 14; Geometry and Topology , 15; Logic, 1; Analysis and Functional Analysis, 24; Probability and Statistics, 4; Computer Science and Numerical Analysis, 4; Applied Mathematics, 5; Combinatoric, 1; Programming, 3 ; TOTAL: 71

| Fellowship (70) * | Noll time study or research |  |  |  |
| :--- | ---: | :--- | :---: | :---: |
| Teaching Fellowship (110)** | $1800-3000$ | 9 | None | full |
| Teaching Assistantship (45) | $600-1800$ | 9 | $\$ 436-540$ | $4-6$ |

* All types, including institutional, NSF, NDEA and Actuarial Science Fellowships. Some are available on
a 12 month basis with proportionately higher stipends.
** Approximately 30 will be combination appointments consisting of 4-hour fellowship and a supplementary University Fellowship or research assistantship.
*** Primarily for students in actuarial science.


## University of Michigan

ANN ARBOR, MICHIGAN 48104
Bruce W. Arden, Acting Chairman
Department of Computer and Communication Sciences
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 4695
Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 24. TOTAL: 24

| Fellowship (20) | 2400 | 9 or 12 | Inc. |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (20) | $1000-2500$ | 9 | In-State | $2-4$ | Teaching |
| Teaching Assistantship (2) | $2700-8000$ | 12 | Student pays | half-full time |  |
| Research Assistantship (15) | 2700 | 12 | Student pays | 20 | Researchers |

## Wayne State University

DETROIT, MICHIGAN 48202
Martin Wechsler, Chairman
Department of Mathematics
Applications must be filed by February 15, 1970
Late applicants will be considered

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3487
Baccalaureate Degrees by Department: 80
Master's Degrees by Department: 38

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 3; Geometry and Topology, 2; Analysis and Functional Analysis, 10; Probability and Statistics, 4. TOTAL: 19

| Fellowship (12) | 2400 | 9 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (25) | $3200-4500$ | 9 | $\$ 450$ | 6 | Teaching |
| Teaching Assistantship (30) | $3000-3800$ | 9 | $\$ 450$ | 6 | Teaching |

## WESTERN MICHIGAN UNIVERSITY GRADUATE STUDY IN MATHEMATICS

The Department has 65 graduate students currently enrolled in programs leading to the regular M.A. (Mathematics), M.S. (Statistics), and Ph.D. degree, and also to the rather unique Specialist in Arts (Sp.A.) degree. This latter degree is designed for the preparation of liberal arts college and community college mathematics teachers. It involves a year of course w.ork beyond the M.A. level and an expository thesis. The M.A. and Sp.A. programs conform rather closely to C.U.P.M. recommended guidelines for the First and Advanced Graduate Components.

Advanced graduate course work is available, and active faculty research is being pursued, in the following fields: algebra, analysis, graph theory, number theory, probability, and topology. All of these are possible concentration areas for Ph.D. or Sp.A. candidates.

Substantial student financial support is available under graduate assistantships, fellowships, and N.S.F. Traineeships.

For information, write to:

A. Bruce Clarke, Head<br>Department of Mathematics<br>Western Michigan University<br>Kalamazoo, Michigan 49001

of financial assistance (with Amount 9 or
number anticipated in 1970-1971)
(dollars) 12 mo .

TUITION
if not included SERVICE REQUIRED
in stipend $\mathrm{Hrs} /$ Week Type

## Western Michigan University

KALAMAZOO, MICHIGAN 49001.

NUMBER OF DEGREES AWARDED IN 1969
A. Bruce Clarke, Head

Baccalaureate Degrees by Institution: 3700
Baccalaureate Degrees by Department: 82
Department of Mathematics
Applications must be filed by March 1, 1970
Master's Degrees by Department: 32

| Fellowship (25) | $\begin{cases}2600-3700 & 8 \\ 2400-4400 & 12\end{cases}$ | $\$ 420$ | $0-3$ | Teaching |  |
| :--- | ---: | ---: | ---: | ---: | :--- |
|  | $\$ 630$ | $0-3$ | Teaching |  |  |
| Teaching Fellowship (24) | $2800-3000$ | 8 | $\$ 360$ | 6 | Teaching |

## MINNESOTA

## Bemidji State College

BEMIDJI, MINNESOTA 56601
W. Richard Slinkman, Chairman

Department of Mathematics and Computer Science

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 733
Baccalaureate Degrees by Department: 32
Master's Degrees by Department: 3

| Teaching Assistantship (2) | $2500-2500$ | 9 | $*$ | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

* $\$ 9.00$ per credit hour resident
$\$ 19.00$ per credit hour nonresident
plus $\$ 39.50$ in fees if registered for 9 or more credit hours or $\$ 14.75$ in fees if registered for 8 or less credit hours


## Mankato State College

MANKATO, MINNESOTA 56001
NUMBER OF DEGREES AWARDED IN 1969
Francis C. Hatfield, Chairman
Baccalaureate Degrees by Institution: 1800
Baccalaureate Degrees by Department: 124
Master's Degrees by Department: 12
Applications must be filed by April 1, 1970

## St. Cloud State College

ST. CLOUD, MINNESOTA 56301
Alyn N. Dull, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 874 Baccalaureate Degrees by Department: 65 Master's Degrees by Department: 6

| Teaching Assistantship (2) | 1800 | 9 | not included | 8 | Non Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |


| TYPE | STIPEND |  | TUITION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| of financial assistance (with | Amount | 9 or | if not included | SERVICE REQUIRED |  |
| number anticipated in 1970-1971) | (dollars) | 12 mo . | in stipend | Hrs/Week | Type |

## University of Minnesota

MINNEAPOLIS, MINNESOTA 55455
NUMBER OF DEGREES AWARDED IN 1969
Edgar Reich, Head
Baccalaureate Degrees by Institution: 8448
Department of Mathematics
Baccalaureate Degrees by Department: 157
Applications must be filed by February 1, 1970
Master's Degrees by Department: 18

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 4; Geometry and Topology, 4; Logic, 2; Analysis and Functional Analysis, 17; Probability and Statistics, 4; Computer Science and Numerical Analysis, 1; Applied Mathematics, 3. TOTAL: 35

| Fellowship (21) | $2400-3500$ | $9-12$ | $\$ 561$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Associateship (40) | $3420-5130$ | $9-12$ | $\$ 561$ | $5-7$ | Teaching |
| Teaching Assistantship (70) | $3060-4590$ | $9-12$ | $\$ 561$ | $5-7$ | Teaching |
| Research Assistantship (8) | 2925 approx. | 9 |  |  | Special duties |

## University of Minnesota

MINNEAPOLIS, MINNESOTA 55455
E. Bruce Lee, Acting Head

Department of Computer, Information,
\& Control Sciences

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 8448
Master's Degrees by Department: 7

PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 1. TOTAL: 1

| Fellowship (5) | $3500-4000$ | $9-12$ | $\$ 500$ | $0-10$ | Varies |
| :--- | ---: | :--- | :--- | ---: | :--- |
| Teaching Fellowship (5) | $3500-4000$ | $9-12$ | $\$ 500$ | $10-15$ | Varies |
| Teaching Assistantship (10) | $3000-3500$ | $9-12$ | $\$ 500$ | $10-15$ | Varies |
| Research Assistantship (8) | $3000-3500$ | $9-12$ | $\$ 500$ | $10-15$ | Varies |
| Scholarship |  |  | $\$ 500$ |  |  |
| Other |  | $\$ 500$ |  |  |  |

## University of Minnesota

MINNEAPOLIS, MINNESOTA 55455
NUMBER OF DEGREES AWARDED IN 1969
B. W. Lindgren, Chairman

Baccalaureate Degrees by Institution: 5299
Department of Statistics
Baccalaureate Degrees by Department: 3
Applications must be filed by March 15, 1970
Master's Degrees by Department:
2

PH. D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 9. TOTAL: 9

| Fellowship (5) | $2400-2800$ | 12 |  |  |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Teaching Assistantship (14) | $3060-3780$ | 9 | Resident | $10-20$ | Teaching \& Grading |
| Research Assistantship (2) | 3900 | 12 | Resident | $10-12$ | Research |

## Winona State College

WINONA, MINNESOTA 55987
R. L. Lokensgard, Chairman

Department of Mathematical Sciences

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 583
Baccalaureate Degrees by Department: 36
Master's Degrees by Department: 11

| Teaching Assistantship (2) | 1200 | 9 | 3 | Teaching |
| :--- | :--- | :--- | :--- | :--- |

## MISSISSIPPI

## Mississippi State College for Women

COLUMBUS, MISSISSIPPI 39701
Donald A. King, Head
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 468
Baccalaureate Degrees by Department: 28

| Fellowship (3) | $300-500$ | 9 | None |  |
| :--- | :---: | :---: | :---: | :---: |
| Graduate Assistantships (5) | $1000-1600$ | 9 | $6-10$ | Tutoring, Grading |
|  |  |  | Papers and Etc. |  |

## Mississippi State University

STATE COLLEGE, MISSISSIPPI 39762
NUMBER OF DEGREES AWARDED IN 1969
Roy D. Sheffield, Head
Baccalaureate Degrees by Institution: 1600
Baccalaureate Degrees by Department: 18

Papers and Etc.

Department of Mathematics
Applications must be filed by March 15, 1970

Master's Degrees by Department: 3

## University of Mississippi

UNIVERSITY, MISSISSIPPI 38677
Thomas A. Bickerstaff, Chairman
Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 900
Baccalaureate Degrees by Department: 98
Master's Degrees by Department:98

PH. D. Degrees awarded during last three years by field of specialization: Analysis and Functional Analysis, 1. TOTAL: 1

| Fellowship (6) | $1800-2800$ | 9 | None |  |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (4) | $2800-3200$ | 9 | None | $3-8$ |

## MISSOURI

## Central Missouri State College

WARRENSBURG, MISSOURI 64093
H. Keith Stumpff, Head

Department of Mathematics
Applications must be filed by March 30, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department: 50
Master's Degrees by Department: 14

## Northeast Missouri State College

KIRKSVILLE, MISSOURI 63501
Dale Woods; Head
Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1142
Baccalaureate Degrees by Department: 44 Master's Degrees by Department: 21

TYPE
of financial assistance (with
STIPEND
Amount 9 or
(dollars) 12 mo .

TUITION
if not included SERVICE REQUIRED)
in stipend Hrs/Week Type

## St. Louis University

ST. LOUIS, MISSOURI 63103
NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Department: 42
Francis Regan, Chairman
Master's Degrees by Department: 37
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 5; Geometry and Topology, 5; Analysis and Functional Analysis, 7; Probability and Statistics, 3; Computer Science and Numerical Analysis, 3. TOTAL: 23

| Teaching Fellowship (14) | 2500 | 9 | Some include <br> tuition | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (4) | 3200 | 9 | Free tuition | up to 9 | Teaching |

## University of Missouri

COLUMBIA, MISSOURI 65201
J.L. Zemmer, Chairman

Department of Mathematics
Applications for fellowships must be filed by
February 21, 1970 and for assistantships by March 21, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2829
Baccalaureate Degrees by Department: 61
Master's Degrees by Department: 19

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6 ; Geometry and Topology, 1; Analysis and Functional Analysis, 4; Probability and Statistics, 4. TOTAL: 15

| Fellowship (5) | $2400-4400$ | 12 | None | None |  |
| :--- | ---: | ---: | :--- | :--- | :--- |
| Teaching Fellowship (10) | $2800-3400$ | 9 | $*$ | $3-5$ | Teaching |
| Teaching Assistantship (60) | $2800-3400$ | 9 | $*$ | $5-7$ | Teaching |
| * Fees are $\$ 220 /$ semester. |  |  |  |  |  |

## University of Missouri

COLUMBIA, MISSOURI 65201.
NUMBER OF DEGREES AWARDED IN 1969
Paul Blackwell, Chairman
Baccalaureate Degrees by Institution: 2829
Department of Computer Science
Applications must be filed by February 21, 1970

| Combined Fellowship/ (4) | $2800-3100$ | 9 | None $*$ | Fellowship |
| :--- | :---: | :---: | :---: | :---: |
| semester |  |  |  |  |

## University of Missouri

COLUMBIA, MISSOURI 65201
Frederick Williams, Chairman
Department of Statistics
Applications must be filed by February 21, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2829
Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Geometry and Topology , 1; Analysis and Functional Analysis, 4; Probability and Statistics, 4. TOTAL: 15

| Fellowship (3) | $2000-2800+$ | $9-12$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (3) | $2800-3600$ | $9-12$ | None ${ }^{*}$ | 3 | Teaching |
| Teaching Assistantship (10) | $2800-3500$ | 9 | None ${ }^{*}$ | 6 | Teaching |
| Research Assistantship (6) | $2800-5000$ | $9-12$ | None ${ }^{*}$ | $12-20$ | Research, |
|  |  |  |  | Full time | Consulting |

# University of Missouri, Kansas City 

KANSAS CITY, MISSOURI 64110
Paul Liebnits, Chairman
Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 772
Baccalaureate Degrees by Department: 27
Master's Degrees by Department: 3

PH.D. Degrees awarded during last three years by field of specialization: Geometry and Topology,1. TOTAL: 1

Teaching Assistantship (20)
NDEA TITLE IV
Fellowship (1)
NSF Traineeship (1)

| $3150-3350$ | 9 | $\$ 445$ | 10 |
| :--- | :--- | :--- | :--- |
| 2000 plus 400 | 9 |  | None |
| per dependent |  |  |  |
| 2400 plus 500 |  |  |  |
| per dependent |  | None |  |

# University of Missouri, Rolla 

ROLLA, MISSOURI 65401
Glen Haddock, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 739
Baccalaureate Degrees by Department: 37
Master's Degrees by Department: 35

| Teaching Assistantship (27) | $3500-3750$ | 9 | $\$ 165$ per. sem. | $6-7$ credit hrs. |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Research Assistnatship (3) | $2200-2800$ | 9 | $\$ 165$ per. sem. | 16 | 6 |

## UNIVERSITY OF MISSOURI-KANSAS CITY GRADUATE STUDY IN MATHEMATICS 1970-1971

The University of Missouri-Kansas City offers the Master of Arts, Master of Science and Doctor of Philosophy degrees in mathematics. The doctoral program was initiated in the fall of 1967 and evolved from a master's program offered for seventeen years. Doctoral research is now being conducted in point-set topology, complex analysis, and ring theory.

The Linda Hall Library of Science and Technology, one of the finest science libraries in the nation with a separate endowment of twenty-five million dollars, is adjacent to our campus. Linda Hall Library has an outstanding mathematical collection including subscriptions to more than 300 current mathematical journals. The University has full access to its holdings and services.

The Department of Mathematics invites applications for graduate assistantships with stipends starting at $\$ 3,150$ for nine months. Fees, amounting to $\$ 445$ per year, are not included in these stipends.

Some NSF traineeships and NDEA Title IV fellowships will be available, and each applicant for a graduate assistantship will be considered for these awards.

For information and application forms write:
Paul Liebnitz, Chairman
Department of Mathematics
University of Missouri-Kansas City
Kansas City, Missouri 64110

## University of Missouri, Rolla

ROLLA, MISSOURI 65401
NUMBER OF DEGREES AWARDED IN 1969
B.E. Gillett, Chairman

Department of Computer Science
Applications must be filed by February 15, 1970

Baccalaureate Degrees by Institution: 739
Baccalaureate Degrees by Department: 23
Master's Degrees by Department: 25

| Fellowship (1) | $2500-3500$ | 9 |  | None | None |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (14) | $3500-3750$ | 9 | $\$ 330$ per.yr. | 20 |  |
| Research Assistantship (4) | $3500-3750$ | 9 | $\$ 330$ per yr. | 20 |  |

## W ashington University

ST. LOUIS, MISSOURI 63130
NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1008
Leon Cooper, Chairman
Baccalaureate Degrees by Department: 10
Department of Applied Mathematics
Master's Degrees by Department:
Applications must be filed by February 15, 1970
PH. D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 2; Applied Mathematics, 1; Operations Research, 10. TOTAL: 13

| Fellowship (8) | $2400-3200$ | 12 | None | None |  |  |
| :--- | :---: | :---: | :--- | :--- | :--- | :--- |
| Teaching Assistantship (5) | $2500-2500$ | 9 | None | 20 | Teaching |  |
| Research Assistantship (15) | variable | 9 or 11 | variable | 20 | Research |  |
|  |  |  |  | None | None |  |
| Scholarship (5) |  |  |  | N |  |  |
| Traineeship (21) | $2500-2500$ | 9 | None | 20 | Teaching/Research |  |

## WASHINGTON UNIVERSITY

Graduate Study Leading to the Degrees of:
M. S. in Applied Mathematics and Computer Science
D. Sc. in Applied Mathematics and Computer Science

Fields of Study :

Applied Analysis<br>Computer Science<br>Numerical Analysis<br>Operations Research<br>Probability and Statistics

Financial Assistance: Fellowships and Traineeships Providing Tuition Remission and a Stipend of $\$ 2,500$.
Inquiries should be addressed to:
Professor Leon Cooper, Chairman
Department of Applied Mathematics and Computer Science
School of Engineering and Applied Science
W ashington University
St. Louis, Missouri 63130

TYPE
of financial assistance (with number anticipated in 1970-1971)

STIPEND
Amount 9 or
(dollars) 12 mo .

TUITION
if not included SERVICE REQUIRED
in stipend Hrs/Week Type

## Washington University

ST. LOUIS, MISSOURI 63130
Guido Weiss, Chairman
Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1038
Baccalaureate Degrees by Department: 16
Master's Degrees by Department: 7

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 2; Analysis and Functional Analysis, 3. TOTAL: 7

| Fellowship (11) | $2400-3400$ | 12 | Full-tuition | 3 | Grading |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (30) | $2500-3600$ |  | Full-tuition | 9 | Teaching \& Grading |
| Research Assistantship (5) | $2600-3400$ | Full-tuition | 9 | Research |  |

## Montana State University

BOZEMAN, MONTANA 59715
NUMBER OF DEGREES AWARDED IN 1969
Louis C. Barrett, Chairman
Department of Mathematics
Applications must be filed by February 1, 1970

## MONTANA

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Geometry and Topology, 1; Analysis and Functional Analysis, 1; Probability and Statistics, 2; Computer Science and Numerical Analysis, 1. TOTAL: . 6

| Teaching Assistantship (14) | $2400-3000$ | 9 | $\$ 43$ per. qtr. | $6-7$ | Teaching |
| :--- | :--- | ---: | :--- | ---: | :--- |
| Traineeship (5) | 2400 | 12 |  |  |  |

## University of Montana

MISSOULA, MONTANA 59801
H. E. Reinhardt, Chairman

Department of Mathematics
Applications must be filed by October 24, 1969

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department: 14
Master's Degrees by Department: 6

| Fellowship (2) | $2400-3400$ | 12 |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Teaching Assistantship (15) | $2400-2800$ | 9 | $\$ 45 * \$ 65 * *$ | Teaching |
| *Resident |  |  |  |  |
| **Nonresident |  |  |  |  |

## NEBRASKA

## Chadron State College

CHADRON, NEBRASKA 69337
Arthur W. Struempler, Chairman
Department of Mathematics
Applications must be filed by April 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 352
Baccalaureate Degrees by Department: 22
Master's Degrees by Department: 1

## Creighton University

OMAHA, NEBRASKA 68131
Derek J.H. Fuller, Chairman
NUMBER OF DEGREES AWARDED IN 1969
Department of Mathematics
Applications must be filed by March 15, 1970
Baccalaureate Degrees by Institution: 590
Baccalaureate Degrees by Department: 23
Master's Degrees by Department: 4

| Teaching Fellowship (3) | $2400-2500$ | 9 | Included | 6 | Teaching |
| :--- | :--- | :--- | :--- | ---: | :--- |
| Graduate Assistant (2) | $2200-2400$ | 9 | Included | 20 | Computer |

## Kearney State College

KEARNEY, NEBRASKA 68847
L. M. Larsen, Head

Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 890
Baccalaureate Degrees by Department: 48
Master's Degrees by Department: 4

| Teaching Assistantship (6-7) | 2000 | 9 | $6-15$ | $6-(15$ other |
| :--- | :--- | :--- | :--- | :--- |

## University of Nebraska

LINCOLN, NEBRASKA 68508
NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2600
Edwin Halfar, Chairman
Baccalaureate Degrees by Department: 32
Department of Mathematics
Master's Degrees by Department:
Applications should be filed by March 1, 1970
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 7; Geometry and Topology, 1; Logic, 1; Analysis and Functional Analysis, 6; Probability and Statistics, 2. TOTAL: 17.

| Fellowship (7) | $2000-2400$ | $9-12$ |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Teaching Assistantship (50) | $2700-3600$ | 9 | $\$ 18.75 /$ | sem. hr. |

## University of Nebraska at Omaha

OMAHA, NEBRASKA 68101
Paul A. Haeder, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1760
Baccalaureate Degrees by Department: 30
Master's Degrees by Department: 4

| Teaching Assistantship (8) | 2400 | 9 | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- |

## NEVADA

## University of Nevada

RENO, NEVADA 89507
E. Maurice Beesley, Chairman

Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department: 16
Master's Degrees by Department:

|  |  | Teaching and |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (6) | $2500-2700$ | 9 | 20 | paper grading |

## NEW HAMPSHIRE

## Dartmouth College

HANOVER, NEW HAMPSHIRE 03755
NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Donald L. Kreider, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970
Baccalaureate Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 1; Logic, 1 ; Analysis and Functional Analysis, 2.TOTAL: 6

| Fellowship (12) | $2600-3200$ | 12 | $0-4$ | Teaching |
| :--- | ---: | ---: | ---: | :--- |
| Teaching Fellowship (15) | $2000-2400$ | 9 | $0-4$ | Teaching |
| Research Assistantship (3) | $2000-2400$ | 9 | $0-4$ | Research |

## University of New Hampshire

DURHAM, NEW HAMPSHIRE 03824
NUMBER OF DEGREES AWARDED IN 1969
M. Evans Munroe, Chairman

Baccalaureate Degrees by Institution:
Department of Mathematics
Applications must be filed by February 15, 1970
Baccalaureate Degrees by Department: 47
Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory , 1; Geometry and Topology, 2; Analysis and Functional Analysis, 1. TOTAL: 4

| Fellowship (5) | $2400-3000$ | 12 | None |  | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (10) | $2400-2400$ | 9 | None | 6 |  |
| Research Assistantship (4) | $2400-2800$ | 9 | None |  |  |
| Scholarship (4) | Tuition only | 9 | None |  |  |

## NEW JERSEY

## Fairleigh Dickinson University (Madison Campus)

MADISON, NEW JERSEY 07940
H.A. Elkholy, Chairman

Department of Mathematics and Physics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 527
Baccalaureate Degrees by Department: . 13
Master's Degrees by Department: • 1

| Teaching Assistantship (3) | 2000 | 9 | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Montclair State College

UPPER MONTCLAIR, NEW JERSEY 07043
Paul C. Clifford, Chairman
Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 870
Baccalaureate Degrees by Department: 87
Master's Degrees by Department: 11

| Teaching Assistantship (1) | 2000 | 9 | 6 | Teaching, |
| :--- | :--- | :--- | :--- | :--- |

## Princeton University

PRINCETON, NEW JERSEY 08540
Elias M. Stein, Chairman
Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 772
Baccalaureate Degrees by Department: 24
Master's Degrees by Department: 12

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 7; Geometry and Topology, 7; Logic, 3; Analysis and Functional Analysis, 9; Probability and Statistics,2; Mathematical Physics,3. TOTAL: 30

| Fellowship NSF (35) | $2400-2800$ | either | $*$ |  |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (4) | $2400-2800$ | 9 | $\$ 1100$ | 6 |
| Teaching Assistantship (8) | 3400 | 9 | $\$ 1100$ | 10 |
| Research Assistantship (10) | 3200 | 9 | $\$ 1100$ |  |
| Princeton Fellowships (9) | $2200-2600$ | 9 | $\$ 1950$ |  |
| Danforth (2) | 2800 | 9 | $\$ 1950$ |  |
|  |  |  |  |  |
| * Tuition paid by NSF + NSF Traineeship. Note: | Teaching Assistants who have not passed General Exam |  |  |  |
| receive automatic rebate in tuition fee of $\$ 850 ;$ after passing General rebate is $\$ 1225$. Samefor Res. Assts. |  |  |  |  |

## Princeton University

PRINCETON, NEW JERSEY 08540
John W. Tukey, Chairman
Department of Statistics
Applications must be filed by January 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 772
Baccalaureate Degrees by Department: 6
Master's Degrees by Department: 2

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics,1. TOTAL:1

| Fellowship (7) | $2400-2800$ | 9 |  | None |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (3) | 3400 | 9 | $\$ 1100$ | 6 | Teaching |
| Research Assistantship (6) | 3200 | 9 | $\$ 1100$ | 20 | Research |
| Princeton Fellowship (2) | $4150-4550$ | 9 | $\$ 1950$ | None |  |

## RUTGERS UNIVERSITY <br> THE STATE UNIVERSITY OF NEW JERSEY <br> Graddate Fellowships and assistantships in Mathematics Special Three-year Research assistantships for Outstanding Students STIPEND: $\$ 4100$ per year plus tuition

Additional three-year Research Assistantships with stipends of $\$ 3183$ per year plus tuition are available. Fellowships are awarded by the Mathematics Department under traineeship programs sponsored by the National Science Foundation, the National Defense Education Act, and the National Aeronautics \& Space Administration. Teaching Assistantships are available: the stipend will be $\$ 3183$ plus tuition. Assistantships require five hours per week of teaching or its equivalent. Scholarships providing free tuition are also available.

## Graduate Program

A full program in mathematics is offered leading to the M.S., M.S.T., and Ph.D. degrees. Rutgers has received a National Science Foundation Science Development Grant to develop a center of excellence in mathematics. The department sponsors some 150 seminars each year, many of which are presented by visiting specialists. The mathematics library contains approximately 10,000 volumes and receives more than 260 journals of interest to mathematicians. This collection will be housed in the new Mathematical Sciences building presently under construction.

Applications for admission will be accepted until July 15, 1970. Students desiring financial support should submit their applications before March 1, 1970. For information and application forms, write to

Admissions Office<br>Rutgers University<br>New Brunswick, New Jersey 08903<br>An equal opportunity employer

## Rutgers, The State University

NEW BRUNSWICK, NEW JERSEY 08903
NUMBER OF DEGREES AWARDED IN 1969
Kenneth G. Wolfson, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970
PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Geometry and Topology, 4; Logic, 2; Analysis and Functional Analysis, 5. TOTAL: 17

| Fellowship Gen. Univ. (10) |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (25) | $2000-2000$ | 9 | Full tuition | Teaching |  |
| Research Assistantship (30) | $3200-3200$ | 9 | Full tuition | $5-6$ |  |
| Scholarship (open) | $3200-3500$ | 9 | Full tuition |  |  |
| Fellowship (NASA, NDEA, | $2000-2800^{* *}$ | 12 | Full tuition |  |  |
| $*$ NSF) (20) |  | Full tuition |  |  |  |
| $*$ Not available to 1st yr. students. |  |  |  |  |  |
| ** Additional allowance for dependents. |  |  |  |  |  |

## Rutgers, The State University

NEW BRUNSWICK, NEW JERSEY 08903
NUMBER OF DEGREES AWARDED IN 1969
Arthur Cohen, Acting Director
Baccalaureate Degrees by Institution:
3370
Baccalaureate Degrees by Department: 1
Master's Degrees by Department:
29
PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 16. TOTAL: 16
\(\left.\begin{array}{lcllll}\hline Fellowship (5) \& 13,000 \& 1-9 \& 5 \& Teaching <br>

Teaching Assistanship (9) \& 28,647 \& 4,12 \& 9 \& \$ 440 \& 15\end{array}\right]\)| Teaching |
| :--- |
| Research Assistantship (5) |

## Seton Hall University

SOUTH ORANGE, NEW JERSEY 07079
Joseph W. Andrushkiw, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 950
Baccalaureate Degrees by Department: 30
Master's Degrees by Department: 7

| Teaching Assistantship | $2000-2400$ | 9 | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Stevens Institute of Technology

HOBOKEN, NEW JERSEY 07030
NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Roger S. Pinkham, Head
Department of Mathematics
Applications must be filed by February 1, 1970
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Analysis and Functional Analysis, 4; Probability and Statistics, 1; Computer Science and Numerical Analysis, 1, Applied Mathematics, 6. TOTAL: 13

| Fellowship | $2400-2800$ | 9 | No |  |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship | $2600-2900$ | 9 |  | 10 |
| Assistantship | 3700 | 9 | 16 |  |

## NEW MEXICO

## Eastern New Mexico University

PORTALES, NEW MEXICO 88130
C.K. Wilson, Chairman

Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 502
Baccalaureate Degrees by Department: 16 Master's Degrees by Department:

9

| Teaching Assistantship (6) | 2000 | 9 | In-state |
| :--- | :--- | :--- | :--- |

## New Mexico Highlands University

LAS VEGAS, NEW MEXICO 87701
NUMBER OF DEGREES AWARDED IN 1969
Kim A. Kirkpatrick, Acting Head
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department.
Department of Physics and Mathematics
Master's Degrees by Department: $\quad 1$
Applications must be filed by March 15, 1970

## New Mexico Institute of Mining and Technology

SOCORRO, NEW MEXICO 87801
Ralph W. Ball, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 70
Baccalaureate Degrees by Department: 12

| Teaching Assistantship (6) | $2600-2750$ | 9 | $\$ 90$ | $5-6$ | Course hrs. of <br> Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

## New Mexico State University

LAS CRUCES, NEW MEXICO 88001
NUMBER OF DEGREES AWARDED IN 1969
Edward D. Gaughan, Chairman
Department of Mathematics
Baccalaureate Degrees by Institution.
Baccalaureate Degrees by Department
Master!s Degrees by Department: 10
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 8 ; Geometry and Topology, 1; Analysis and Functional Analysis, 5; Computer Science and Numerical Analysis,1; Applied Mathematics, 11; Others, 1. TOTAL: 27

| Fellowship (12) |  | Both |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (35) | $2900-3300$ | 9 | 414 | 20 | Teaching |

## New Mexico State University

| LAS CRUCES, NEW MEXICO 88001 | NUMBER OF DEGREES AWARDED IN 1969 |
| :--- | :--- |
| J. Mack Adams, Head | Baccalaureate Degrees by Institution: |
| Department of Computer Science | Master's Degrees by Department: |
| Applications must be filed by February 15,1970 |  |


| Fellowship (1) | $2900-2900$ | 12 | Yes |  | No duties |
| :--- | ---: | ---: | ---: | ---: | :--- |
| Teaching Assistantship (3) | $2700-2700$ | 9 | Yes | 20 | Teaching/Research |

## University of New Mexico

ALBUQUERQUE, NEW MEXICO 87106
L. H. Koopmans, Chairman

Department of Mathematics and Statistics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1492
Baccalaureate Degrees by Department: 14
Master's Degrees by Department: 14

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Geometry and Topology, 2; Analysis and Functional Analysis, 1; Probability and Statistics, 4; Applied Mathematics, 7 ; Combinatorial Analysis, 1. TOTAL: 21

| Fellowship (12) | $2000-3400$ | 12 |  |  |  |
| :--- | ---: | ---: | :--- | ---: | ---: |
| Teaching Assistantship (30) | $2300-3000$ | 9 | Waived | 20 | Teaching |

Some people on fellowships can be given a teaching course per semester for 600/700 extra.

## NEW YORK

## City University of New York, Brooklyn College

BROOKLYN, NEW YORK 11210
James Singer, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2500
Baccalaureate Degrees by Department: 150
Master's Degrees by Department: 5

| Teaching Fellowship (3) | $4000-4500$ | 9 | exempt | 6 | Teaching |
| :--- | :--- | :--- | :---: | :--- | :--- |
| Teaching Assistantship (5) | $14 / \mathrm{h}-20 / \mathrm{h}$ | 9 | $\$ 35 / \mathrm{credit}$ | $6-12$ | Teaching |

## The Doctoral Program in Mathematics of <br> The City University of New York

is at the Graduate Center Building of CUNY in mid-Manhattan, opposite the Public Library and Bryant Park. This program is now in its sixth year.

Advanced students have office space and others have carrels in the excellent departmental library. The student body is small enough to facilitate close contact with the staff.

Currently, the staff consists of Eldon Dyer, Executive Officer; Louis Auslander, Michel L. Balinski, Charles Barton, Edgar A. Feldman, Alex Heller, Alan J. Hoffman (Adjunct), Raymond Hoobler, Harvey M. Hyman, Richard E. Isaac, Stanley Kaplan, Linda Keen, Joseph Lewittes, Martin Moskowitz, Burton Randol, Richard Sacksteder, Robert Schatten, Raymond Smullyan, Fred Supnick, Alphonse T. Vasquez, Leo Zippin.
For a description of courses currently offered and other information, write to the
Execulive Officer in Mathematics THE CITY UNIVERSITY OF NEW YORK

## Graduate Center

33 West 42nd Street
New York, New York 10036

## City University of New York, Graduate Division

NEW YORK, NEW YORK 10036
Eldon Dyer, Chairman
Department of Mathematics
Applications must be filed by February 1, 1970
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 5; Geometry and Topology, 8; Analysis and Functional Analysis, 6; Computer Science and Numerical Analysis,5. TOTAL: 24

| Fellowship (8) | $2000-3000$ | 9 |  |  |
| :--- | ---: | ---: | ---: | :--- |
| Teaching Fellowship (8) | $2200-3400$ | 9 | 4 | Teaching |
| Teaching Assistantship (15) | $2200-3400$ | 9 | 4 | Teaching |
| Research Assistantship (15) | 3600 | 12 | Guided Research |  |
| Scholarship (10) |  |  |  |  |

## City University of New York, Baruch College

NEW YORK, NEW YORK 10468
Herbert Arkin, Chairman
Department of Statistics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 822
Baccalaureate Degrees by Department: 22
Master's Degrees by Department: 19

| Teaching Assistantship (1) | $5500-5925$ | 12 | 20 | Laboratory |
| :--- | :---: | :---: | :---: | :---: |
| Research Assistantship (6) | $3340-4090$ | 9 | 15 | Supervisor |
| Research |  |  |  |  |

## ADELPHI UNIVERSITY <br> GARDEN CITY, N. Y. 11530

The Department of Mathematics offers work in pure and applied mathematics leading to the M.S. and Ph.D. degrees. Fields of research are: analysis, numerical analysis, differential and integral equations, homological algebra, group theory, differential topology, category theory, applied mathematics (fluid dynamics, celestial mechanics, elasticity theory, electromagnetic theory, magnetohydrodynamics).

The M.S. Degree is also offered in Applied Science. An In-Service N.S.F. Institute offers courses which lead to the M.S. for high school teachers of mathematics. A computing center (CDC 3300) is available.

Applications for graduate scholarships, assistantships and transeeships are invited. Fulltime graduate students have ample opportunity for close personal contact with the faculty. Living accomodations are available near the campus. Adelphi University is within easy ( 40 minutes) commuting distance from New York City by car or by train.

For Further Information Write To
Professor F. V. Pohle (Chairman), Department of Mathematics
Adelphi University, Long Island, Garden City
New York, 11530; (516) PI-7-2200

## City University of New York, Hunter College

NEW YORK, NEW YORK 10021
Ada Peluso, Acting Chairman
Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1550
Baccalaureate Degrees by Department: 60
Master's Degrees by Department: 20

## City University of New York, Lehman College

NEW YORK, NEW YORK 10468
NUMBER OF DEGREES AWARDED IN 1969
Israel H. Rose, Chairman
Department of Mathematics
Applications must be filed by Apri1 1, 1970

Baccalaureate Degrees by Institution
Baccalaureate Degrees by Department: 1325
Master's Degrees by Department:
Teaching Assistantship (3) $3000-5000 \quad 9 \quad \$ 25 /$ credit* $3-6$ (2nd term only) Teaching
*Waived in many cases.

## City University of New York, Queens College

FLUSHING, NEW YORK 11367
Joseph Hershenov, Chairman
Department of Mathematics
Applications must be filed by April 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3014
Baccalaureate Degrees by Department: 142
Master's Degrees by Department: 4

| Teaching Assistantship (2) | Approx. <br> $5700^{*}$ | 9 | $\$ 25 / \mathrm{cr} . \mathrm{hr}$. |
| :--- | :--- | :--- | :--- |

*New contract has just recently been signed with UFCT the salary for this classification (Teaching Assistant)

## Columbia University

NEW YORK, NEW YORK 10027
NUMBER OF DEGREES AWARDED IN 1969
Edgar R. Lorch, Chairman
Department of Mathematics
Baccalaureate Degrees by Institution: 901
Baccalaureate Degrees by Department: 30
Master's Degrees by Department: 14
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 12; Geometry and Topology, 3; Analysis and Functional Analysis, 6; Others,4. TOTAL: 25

| Fellowship (20-25) | $3300-3300$ | 12 | N/A | $12-15$ | Teaching for 2 yrs. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (25-30 | $3300-3300$ |  |  | $12-15$ | Teaching for 2 yrs. |
| Teaching Assistantship (N/A) |  |  |  |  |  |
| Research Assistantship (9) | $3300-3300$ |  |  |  |  |
| Scholarship | $3300-3300$ |  |  |  |  |

TYPE
of financias assistance (with
STIPEND
TUITION
SERVICE REQUIRED
number anticipated in 1970-1971)
if not included
Amount 9 or
in stipend Hrs /Week
(dollars) 12 mo .
$K \quad$ Type

## Columbia University

NEW YORK, NEW YORK 10027
NUMBER OF DEGREES AWARDED IN 1969
Myron F. Rosskopf, Chairman
Master's Degrees by Department:
Department of Mathematical Education
Applications must be filed by February 1, 1970
PH.D. Degrees awarded during last three years by field of specialization: Mathematical Education, 7. TOTAL: 7

| Fellowship (4) | 2400 | optional |
| :--- | :--- | :--- |
| Research Assistantship (3) | 9 | 24 |
| Scholar'ship (1) | 9 |  |

## Columbia University

NEW YORK, NEW YORK 10027
NUMBER OF DEGREES AWARDED IN 1969
Herbert E. Robbins, Chairman
Master's Degrees by Department: 10
Department of Mathematical Statistics
Applications must be filed by January 12, 1970
PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 14. TOTAL: 14

| Fellowship (23) | $275 / \mathrm{mo}$ | $9-12$ | None |
| :--- | :--- | :--- | :--- |

## Cornell University

ITHACA, NEW YORK 14850
NUMBER OF DEGREES AWARDED IN 1969
W.H. J. Fuchs, Chairman

Baccalaureate Degrees by Institution: 2485
Department of Mathematics
Applications must be filed by February 1, 1970
Baccalaureate Degrees by Department: 45
Master's Degrees by Department: 9
PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 9; Geometry and Topology, 3; Logic, 5; Analysis and Functional Analysis, 6; Probability and Statistics, 5. TOTAL: 28

| Fellowship (20) | $1850-3000$ | 9 | None | None |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (46) | $2600-2700$ | 9 | None | $3-4$ class |
|  |  |  |  | hrs. |
| Research Assistantship (15) | 4600 | 9 | 2350 | For advanced students only |

## Cornell University

ITHACA, NEW YORK 14850
NUMBER OF DEGREES AWARDED IN 1969
Juris Hartmanis, Chairman Master's Degrees by Department:
Department of Computer Science
Applications must be filed by January 15, 1970
PH. D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 3. TOTAL: 3

| Fellowship (15) | $2400-3000$ | 9 | Paid |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (20) | 2700 | 9 | Paid | 16 | Teaching |
| Research Assistantship (14) | 2600 | 9 | Paid | 16 | Research |

TYPE
of financial assistance (with
number anticipated in 1970-1971) (dollars) 12 mo .

TUITION
if not included in stipend Hrs/Week Type

## C. W. Post College

GREENVALE, NEW YORK 11548
NUMBER OF DEGREES AWARDED IN 1969
Bernard Seckler, Chairman
Baccalaureate Degrees by Institution:
Department of Mathematics
Applications must be filed by March 1, 1970
Baccalaureate Degrees by Department:
Master's Degrees by Department: 12
$\overline{\text { Graduate Assistantship (5) }} \quad \overline{2000-2500} \quad 18$

## Fordham University

NEW YORK, NEW YORK 10458
Hing Tong, Chairman
Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1341
Baccalaureate Degrees by Department: 31
Master's Degrees by Department: 11

| Fellowship (1) | $2400-3000$ | 9 | Free tuition |  | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (4) | $2400-3000$ | 9 | Free tuition | 3 | 8 |
| Teaching Assistantship (7) | $2400-3000$ | 9 | Free tuition | Miscellaneous |  |
| NSF Trainee (3) | $2400-2800$ | 9 | Free tuition |  |  |

## Hofstra University

HEMPSTEAD, NEW YORK 11550
Robert Bumcrot, Chairman
Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 650
Baccalaureate Degrees by Department: 20
Master's Degrees by Department: 3

| Fellowship (1-2) | 2500 | 9 | $\$ 62 / \mathrm{hr}$ | up to 10 | Various |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (1-2) | $600-2400$ | 9 | $\$ 62 / \mathrm{hr}$. | $2-6$ | Teaching |

## New York University

NEW YORK, NEW YORK 10012
NUMBER OF DEGREES AWARDED IN 1969
Jurgen K. Moser, Director
Courant Institute of Mathematical Sciences
Applications must be filed by January 15, 1970
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 12; Geometry and Topology , 3; Analysis and Functional Analysis, 21; Probability and Statistics,5; Computer Science and Numerical Analysis, 8; Applied Mathematics, 16. TOTAL: 65

| Fellowship (70) | $3300-3700$ | 12 | Individual | Individual |
| :--- | :--- | :--- | :--- | :--- |
| Research Assistantship (40) | $3300-3700$ | 12 | Individual | Individual |

## New York University, University Heights

BRONX, NEW YORK 10453
J.B. Keller, Chairman

Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3000
Baccalaureate Degrees by Department: 23
Master's Degrees by Department: 10

TYPE
of financial assistance (with
number Amount 9 or
(dollars) 12 mo .

## New York University

NEW YORK, NEW YORK 11023
NUMBER OF DEGREES AWARDED IN 1969
Ernest Kurnow, Chairman
Department of Quantitative Analysis
Baccalaureate Degrees by Institution:
B.accalaureate Degrees by Department: 20

Master's Degrees by Department: 20
PH.D. Degrees awarded during last three years by field of specialization: 'Probability and Statistics, 9. TOTAL: 9

| Teaching Fellowship (2) | $3250-3250$ | 9 | No* | 12 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Research Assistantship (8) | $2000-2500$ | 9 | No* | 12 | Research |
| Scholarship (15) | free tuition |  |  |  |  |
|  |  |  |  |  |  |

## Polytechnic Institute of Brooklyn

BROOKLYN, NEW YORK 11201
NUMBER OF DEGREES AWARDED IN 1969
H. Hochstadt, Chairman

Department of Mathematics
Applications must be filed by March 1, 1970
Baccalaureate Degrees by Institution: 350
Baccalaureate Degrees by Department: 41
Master's Degrees by Department: 15
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 9 ; Analysis and Functional Analysis, 12; Probability and Statistics, 3. TOTAL: 24

| Fellowship (3) | 2400 | 9 | Remitted | None |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Teaching Fellowship (12) | 2430 | 9 | Remitted | $4-6$ | Teaching |
| Teaching Assistantship (2) | 4600 | 12 | $\$ 2200$ | 20 | Research |

## Pratt Institute

BROOKLYN, NEW YORK 11205
NUMBER OF DEGREES AWARDED IN 1969
A. B. Finkelstein, Chairman

Baccalaureate Degrees by Institution: 559
Baccalaureate Degrees by Department: 8

Master's Degrees by Department: 8

## POLYTECHNIC INSTITUTE OF BROOKLYN

LOCATION: Brooklyn Campus, and Long Island Center at Farmingdale, Long Island, New York.
DEGREES: M.S. and Ph.D.
FIELDS: Applied Mathematics, Algebra, Analysis, Probability, Statistics, etc.
AVAILABLE MINOR OPIIONS: Applied Mechanics, Aerospace Engineering, Electrophysics, Com-
munication Theory, Automatic Control, Network Theory, Physics, etc.

| FELLOWSHIPS: Teaching, Research. |
| :--- |
| Write for information to: $\quad$ Dean of Graduate School • . or . . . Department of Mathematics |
| Polytechnic Institute of Brooklyn |
| 333 Jay Street |
| Brooklyn, New York 11201 |

## Rensselaer Polytechnic Institute

TROY, NEW YORK 12181
George H. Handelman, Chairman
Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department:
Master's Degrees by Department: 29

37

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 1; Analysis and Functional Analysis, 2; Computer Science and Numerical Analysis, 2; Applied Mathematics, 10 ; Operations Research, 2; Graph Theory, 1. TOTAL: 20

| Fellowship (6) | $2400-2800$ | 12 | None | None |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (4) | $2400-2800$ | 12 | None | None | in first year |
| Teaching Assistantship (8) | $2400-2800$ | 9 | None | $6-8$ | Teaching |
| Scholarship(1-2) | None |  | None | None |  |

## State University College at Buffalo

BUFFALO, NEW YORK 14222
Rudolph J. Cherkauer, Chairman
Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1321
Baccalaureate Degrees by Department: 46
Master's Degrees by Department: 17
Teaching Fellowship (3) 2500-2700 $\quad 9 \quad 3-6 \quad$ Teaching

## State University of New York at Fredonia

FREDONLA, NEW YORK 14063
Frank R. Olson, Chairman
Department of Mathematics
Applications must be filed by March 10,1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 550
Baccalaureate Degrees by Department: 16
Master's Degrees by Department: 4

| Teaching Assistantship (6) | $2200-2600$ | 9 | $6-8$ | Recitations |
| :--- | :--- | :--- | :--- | :--- | Grading

## State University College at Geneseo

GENESEO, NEW YORK 14454
William A. Small, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 697
Baccalaureate Degrees by Department: 42
Master's Degrees by Department: 5

| Teaching Assistantship (4) | 2500 | 9 | None | $6-8$ | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## State University College at Oswego

OSWEGO, NEW YORK 13126
Richard D. Mayer, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1150
Baccalaureate Degrees by Department: 34
Master's Degrees by Department:

4

| Teaching Assistantship (6) | 2500 | 9 | None | $41 / 2 \mathrm{hrs}$. |
| :--- | :--- | :--- | :--- | :--- |

## State University College of New Paltz

NEW PALTZ, NEW YORK 12561
Arthur W.J. Ullman, Chairman
Department of Mathematics
Applications are offered on a first come basis

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1298
Baccalaureate Degrees by Department: 51
Teaching Assistantship (5) $1500-300012$ Max. 6 Teaching

## State University of New York at Albany

ALBANY, NEW YORK 12203
NUMBER OF DEGREES AWARDED IN 1969
Vincent F. Cowling, Chairman
Baccalaureate Degrees by Institution:
1230
Department of Mathematics
Baccalaureate Degrees by Department: 130
Applications must be filed by February 15, 1970

| Fellowship (2) | $3000-4000$ | $9-1$ | None | 20 | Research |
| :--- | :--- | ---: | :--- | :--- | :--- |
|  |  | $12-1$ |  |  |  |
| Teaching Fellowship (1) | 2800 | 9 | None | 20 | Teaching |
| Teaching Assistantship (16) | $2800-3000$ | 9 | None | 20 | Teaching |
| Research Assistantship (2) | $2500-3000$ | 12 | None | 20 | Research |

## State University of New York at Albany

ALBANY, NEW YORK 12203
E.D. Reilly, Jr. Chairman

Department of Computer Science
Applications must be filed by April 1, 1970

| Teaching Assistantship (4) | 2700 | 9 | 20 | Teaching 2 sections |
| :--- | :--- | :--- | :--- | :--- |
| Research Assistantship (4) | 2700 | 9 | 20 | Programming |

## State University of New York at Buffalo

BUFFALO, NEW YORK 14226
NUMBER OF DEGREES AWARDED IN 1969
K.D. Magill, Jr. Chairman

Baccalaureate Degrees by Institution:
Department of Mathematics
Baccalaureate Degrees by Department:74

Applications must be filed by March 15, 1970
Master's Degrees by Department: 19
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory ,2; Geometry and Topology,1. TOTAL: 3

| Fellowship (12) | $2000-4000$ | $9-12$ | Waived |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (60) | $2600-3417$ | 9 | Waived | 4 | Teaching |
| Research Assistantship (6) | $3000-4000$ | $9-12$ | Waived | Research |  |
| Scholarship (3) | $2000-3000$ | 9 | Waived |  |  |

## State University of New York at Buffalo

BUFFALO, NEW YORK 14214
Seymour Geisser, Chairman
Department of Statistics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1185
Master's Degrees by Department:
6

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 3 . TOTAL: 3

| Fellowship (7) | $2400-3600$ | 12 | 10 | Teaching and |
| :--- | :--- | ---: | :--- | :--- |
| Teaching Assistantship (13) | $2600-3000$ | 9 |  | Research |
|  |  |  | 10 | Research |

## STATE UNIVERSITY OF NEW YORK <br> AT <br> BINGHAMTON

The Mathematics Department of the State University of New York at Binghamton is growing rapidly, and can now offer graduate students both an unusual amount of personal attention from an active faculty and a lively research atmosphere. A number of research seminars in algebra, analysis, and topology are in current operation. Doctoral research is possible in the fields of algebra, differential equations, functional analysis, graph theory, and topology. The department is especially strong in general topology.

Further information about the program may be obtained by writing to The Department of Mathematics.

## FINANCIAL AID

SPECIAL FELLOWSHIPS AND GRADUATE ASSISTANTSHIPS WITH STIPENDS UP TO $\$ 3,250$ PLUS REMISSION OF TUITION ARE AVAILABLE. SOME PART-TIME INSTRUCTORSHIPS WITH CONSIDERABLY HIGHER STIPENDS ARE ALSO HELD BY GRADUATE STUDENTS.
New York State residents may qualify for awards for graduate study at The State University of New York at Binghamton under the New York State Scholar Incentive Award program. For information and application forms, write to Regents Examination and Scholarship Center, State Education Department, Albany, New York, 12201.

Application forms for admission to the Graduate School and for Assistantships and Fellowships may be obtained from the Graduate Admissions Office, State University of New York at Binghamton, Binghamton, New York, 13901.

## State University of New York at Stony Brook

STONY BROOK, NEW YORK 11790
James Simons, Chairman
Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 988
Baccalaureate Degrees by Department: 64
Master's Degrees by Department: 4

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 3; Geometry and Topology, 2; Analysis and Functional Analysis,1. TOTAL: 6

| Fellowship (20) | $*$ | Voluntary teaching |
| :--- | :--- | :--- |
| Teaching Assistantship (58) | $*$ | 4 |
| Research Assistantship (6) | $*$ | Teaching |
| Scholarship (4) | $*$ | Voluntary teaching |
|  |  | Voluntary teaching |

* Every successful applicant is automatically considered for financial assistance, unless he specifically requests otherwise.

There is no separate application for financial assistance that must be completed.

## State University of New York at Stony Brook

STONY BROOK, NEW YORK 11790
NUMBER OF DEGREES AWARDED IN 1969
Irving Gerst, Chairman
Department of Applied Analysis
Applications must be completed by March 15, 1970

Baccalaureate Degrees by Institution: 988
Baccalaureate Degrees by Department: 68 Master's Degrees by Department: 8

PH. D. Degrees awarded during last three years by field of specialization: Applied Mathematics, 4. TOTAL: 4

| Fellowship (8) | $2400-3300$ | 9 | Free |  | Teaching |
| :--- | :---: | :--- | :--- | ---: | :--- |
| Teaching Fellowship (2) | 3000 | 9 | Free | 5 | Free |
| Teaching Assistantship (23) | $2626-2754$ | 9 | 20 | Teaching |  |
| Research Assistantship (25) | $2626-2754$ | 9 | Free | 20 | Research |

## STATE UNIVERSITY OF NEW YORK BINGHAMTON RESEARCH ASSOCIATESHIPS IN MATHEMATICS

1970-71
We invite applications for Research Associateships in mathematics. These are one-year appointments with possible renewal for a second year. Stipends: $\$ 10,000$ for the academic year. Teaching load: two courses one semester and full-time research for one semester.

Applicants should have received the Ph. D. degree in mathematics by September, 1970. For information, write to: Professor L. F. McAuley, Department of Mathematics. Deadline for applications is March 15, 1970.

## Syracuse University

SYRACUSE, NEW YORK 13210
Donald E. Kibbey, Chairman
Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2230
Baccalaureate Degrees by Department: 35
Master's Degrees by Department: 18

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 9; Geometry and Topology, 4; Analysis and Functional Analysis, 6; Computer Science and Numerical Analysis, 1. TOTAL: 20

| Fellowship (20) | $2000-2800$ | either | None |  |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (60) | 2400 | 9 | 6 | Teaching |

## Syracuse University

SYRACUSE, NEW YORK 13210
NUMBER OF DEGREES AWARDED IN 1969
W. Semon, Director

Master's Degrees by Department:
Department of Systems \& Information Science
Applications must be filed by February 1, 1970
PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 2. TOTAL: 2

| Fellowship (10) | $2000-2400$ | 9 |  |
| :--- | ---: | ---: | ---: |
| Teaching Assistantship (16) | 2400 | 9 | $20^{*}$ |
| Research Assistantship (14) | 4000 | 12 |  |
|  |  |  |  |

## University of Rochester

ROCHESTER, NEW YORK 14627
J.H.B. Kemperman, Chairman

Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1062
Baccalaureate Degrees by Department: 27
Master's Degrees by Department: 15

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 7; Geometry and Topology, 5; Analysis and Functional Analysis, 6; Probability and Statistics, 1.
TOTAL: 19

| Fellowship (15) | $2000-2800^{*}$ | 12 | Waived |
| :--- | :--- | ---: | :--- |
| Teaching Assistantship (30) | $2600-2800$ | 9 | Waived |
|  |  |  |  |
| * Dependency Allowance in some cases |  |  |  |
| ** Hours of classroom teaching |  |  |  |

An urban university in a suburban setting. . . within easy travel distance of some of the world's richest cultural and research resources.

The Mathematics faculty is actively engaged in research relating to fluid dynamics, diffraction theory, graph theory, statistics, operations research, ordinary differential equations, control theory, functional analysis, point set topology, and elasticity.

Graduate work leading to the Master of Arts is offered in both pure and applied mathematics.

Approximately twelve graduate assistantships will be available for the academic year 1970-71.

Interested students are requested to write:
Michael F. Capobianco, Chairman
Department of Mathematics - St. John's University Jamaica, New York 11432

## University of Rochester

ROCHESTER, NEW YORK 14627
W.J. Hall, Chairman

Department of Statistics
Applications must be filed by February 15, 1970

| Teaching Assistantship (8) | 2600 | 9 | None | 12 |
| :--- | :--- | ---: | :--- | ---: |

## Yeshiva University

NEW YORK, NEW YORK 10033
Lewis Coburn, Chairman
Department of Mathematics
Belfer Graduate School of Science
Applications must be filed by February 15, 1970
PH.D. Degrees awarded during last three years by field of specialization: Logic, 5; Analysis and Functional Analysis, 9. TOTAL: 14

| Fellowship (20) | $2400-4000$ | 12 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (4) | $2400-4500$ | 12 |  | 4 | Teaching |
| Teaching Assistantship (6) | $1250-5250$ | 12 | $\$ 1250$ | 4 | Teaching |
| Research Assistantship (10) | $1250-5250$ | 12 | $\$ 1250$ | 6 |  |

## NORTH CAROLINA

## Appalachian State University

BOONE, NORTH CAROLINA 28607
Ray L. Graham, Acting Chairman
Department of Mathematics
Applications must be filed by April 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1004
Baccalaureate Degrees by Department: 46 Master's Degrees by Department: 10

| Teaching Assistantship (7) | $1800-3600$ | 9 | 15 | Teaching |
| :--- | :--- | :--- | :--- | :--- |

## Duke University

DURHAM, NORTH CAROLINA 27706
NUMBER OF DEGREES AWARDED IN 1969
Seth Warner, Chairman
Baccalaureate Degrees by Institution: 990
Department of Mathematics
Applications must be filed by February 15, 1970
Baccalaureate Degrees by Department: 55

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 5; Geometry and Topology, 3; Logic, 1; Analysis and Functional Analysis, 5; Probability and Statistics, 2. TOTAL: 16

| Fellowship (13) | $2400-3300$ | 12 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (14) | $3300-3600$ | 9 | $\$ 1368$ | 8 | Teaching |
| Research Assistantship (4) | $3000-5900$ | $9-11$ | $\$ 1026-1710$ | $0-20$ | Research |

## East Carolina University

GREENVILLE, NORTH CAROLINA 27834
Tullio J. Pignani, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1626
Baccalaureate Degrees by Department: 67
Master's Degrees by Department:

| Fellowship (9) | 2000 | 9 | $\$ 117 /$ qtr. | 5 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Computer Assistants (2) | 2000 | 9 | $\$ 117 /$ qtr. | 10 | Assist in Computer |
|  |  |  |  | Lab |  |

## North Carolina State University

RALEIGH, NORTH CAROLINA 27607
NUMBER OF DEGREES AWARDED IN 1969
Nicholas J. Rose, Chairman
Department of Mathematics
Applications must be filed by February 1, 1970
Baccalaureate Degrees by Institution: 1663
Baccalaureate Degrees by Department: 60
Master's Degrees by Department: 25
PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 3; Geometry and Topology, 1; Analysis and Functional Analysis, 3; Probability and Statistics, 1; Applied Mathematics, 6. TOTAL: 14

| Fellowship (4) | $2400-3200$ | 12 | Yes | $6-12$ | Teaching or Prof's |
| :--- | ---: | ---: | ---: | ---: | :--- |
| Teaching Assistantship (50) | $1900-3200$ | 9 | $\$ 352$ |  | Asst. |
| Research Assistantship (2) | $2400-3200$ | 9 | $\$ 352$ | $8-12$ | Research |

## North Carolina State University

RALEIGH, NORTH CAROLINA 27607
NUMBER OF DEGREES AWARDED IN 1969
D.D. Mason, Chairman

Baccalaureate Degrees by Institution: 1663
Department of Experimental Statistics
Applications for Fellowships must be filed by February
15, 1970 for Assistantships by March 15, 1970

Baccalaureate Degrees by Department: 5 Master's Degrees by Department: 17

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 21. TOTAL: 21

| Fellowship (30) | $2400-3600$ | 12 | $0-20$ | Teaching |
| :--- | ---: | ---: | ---: | :--- |
| Teaching Assistantship (6) | $2700-3600$ | 9 | $0-20$ | Teaching |
| Research Assistantship (12) | $2700-3600$ | 12 | $0-20$ | Research |

## University of North Carolina

CHAPEL HILL, NORTH CAROLINA 27514

## NUMBER OF DEGREES AWARDED IN 1969

Fred B. Wright, Chairman
Baccalaureate Degrees by Institution: 2528
Department of Mathematics
Baccalaureate Degrees by Department: 94
Master's Degrees by Department: 13
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Geometry and Topology, 3; Analysis and Functional Analysis, 8. TOTAL: 12

| Fellowship (17) | $2000-4000$ | 9 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (2) | 3600 none | 9 | $*$ | 3 | Teaching |
| Teaching Assistantship (30) | 3600 none | 9 | $*$ | 6 | Teaching |

*Approximately $\$ 100$ tuition plus $\$ 80$ fees per semester.

## University of North Carolina

CHAPEL HILL, NORTH CAROLINA 27514
B.G. Greenberg, Chairman

Department of Biostatistics

NUMBER OF DEGREES AWARDED IN 1969 Baccalaurate Degrees by Institution: 2528
Master's Degrees by Department: 17

PH.D. Degrees awarded during last three years by field of specialization: Applied Mathematics, 1; Biostatistics, 1; Public Health, 2. TOTAL: 4

| Fellowship (22) | $2400-2600$ | 12 | 20 | Research, some <br> Research Assistantship (3) |
| :--- | :---: | :---: | :---: | :---: |
| teaching |  |  |  |  |

## University of North Carolina

CHAPEL HILL, NORTH CAROLINA 27514
Frederick P. Brooks, Jr., Chairman
Department of Computer and Information Science
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2528
Master's Degrees by Department: 2

PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 2. TOTAL: 2

| Fellowship (2) | 3200 | 9 | $\$ 175$ | 4 |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Teaching Assistantship (20) | 3200 | 9 | $\$ 175$ | 20 | Teaching, preparation, <br> etc. |
| Research Assistantship (8) | 3200 | 9 | $\$ 175$ | 20 | Research |
| NSF Traineeships (3) | $2800^{*}$ | 12 |  |  |  |
| * Plus $\$ 500$ for each dependent. |  |  |  |  |  |

## UNIVERSITY OF NORTH CAROLINA GRADUATE PROGRAMS IN STATISTICS

M.S. AND Ph.D. PROGRAMS are offered with specialization in

APPLIED PROBABILITY
CODING THEORY
COMBINATORICS
DESIGN AND ANALYSIS OF EXPERIMENTS INFORMATION THEORY
MULTIVARIATE ANALYSIS
NONPARAMETRIC INFERENCE

OPERATIONS RESEARCH PROBABILITY THEORY SEQUENTIAL ANALYSIS STATISTICAL COMMUNICATION THEORY STATISTICAL INFERENCE STOCHASTIC PROCESSES TIME SERIES ANALYSIS

FINANCIAL ASSISTANCE is available in the form of departmental fellowships and research assistantships with stipends from $\$ 2,800$ for the academic year. Holders of these awards pay in-state tuition and fees, a saving of $\$ 500$ over the out-of-state charges.

APPLICATION for admission and financial award should be made before February 1, 1970. Forms and further information may be obtained by writing to:

Director of Graduate Admissions<br>Department of Statistics<br>University of North Carolina<br>Chapel Hill, North Carolina 27514

## University of North Carolina

CHAPEL HILL, NORTH CAROLINA 27514
George E. Nicholson, Jr. Chairman
Department of Statistics

NUMBER OF DEGREES AWARDED IN 1969
Master's Degrees by Department:
5

PH. D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 17. TOTAL: 17

| Fellowship (5) | $2000-4000$ | 12 |  | $3-5$ | Lab Supervision |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Research Assistantship (20) | 2800 | 9 | $\$ 332$ | $3-5$ | Grading |
|  |  |  |  |  | Lab Supervision |
| Grading |  |  |  |  |  |

## University of North Carolina at Greensboro

GREENSBORO, NORTH CAROLINA 27412
E.E. Posey, Head

Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1000
Baccalaureate Degrees by Department: 50
Master's Degrees by Department: 5

| Teaching Fellowship (15) | $2000-3200$ | 9 | $\$ 300$ | $3-6$ | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Research Assistantship (2) | $1600-2400$ | 9 | $\$ 300$ | Not specific | Research Assistant |

## Wake Forest University

WINSTON SALEM, NORTH CAROLINA 27109
Ivey C. Gentry, Chairman
Department of Mathematics
Applications must be filed by March $\cdot 1,1970$

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 571
Baccalaureate Degrees by Department: 37
Master's Degrees by Department: 5

| Fellowship (4) | 2200 | $\$ 1075$ |  |
| :--- | :--- | :--- | :--- |
| Teaching Assistantship (2) | 3250 | $\$ 1075$ |  |
| Scholarship (4) | 1075 | $\$ 1075$ |  |

## NORTH DAKOTA

## North Dakota State University

FARGO, NORTH DAKOTA 58102
Robert F. Tidd, Chairman
Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 900
Baccalaureate Degrees by Department: 53 Master's Degrees by Department:

7
Teaching Assistantship (4) $2000-2500 \quad 9 \quad \$ 2 / \mathrm{cr}$. Half time

## University of North Dakota

GRAND FORKS, NORTH DAKOTA 58201
Ronald Bzoch, Chairman
Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1216
Baccalaureate Degrees by Department: 34
Master's Degrees by Department:
Teaching Assistantship (7) $2200 \quad$ None $\quad 9 \quad$ Teaching

## OHIO

## Bowling Green State University

BOWLING GREEN, OHIO 43402
L.C. Graue, Chairman

Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2303 Baccalaureate Degrees by Department: 80
Master's Degrees by Department: 10

| Fellowship (3) | $2400-2600$ | 12 |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Teaching Assistantship (25) | $2300-2800$ | 9 |  | $\$ 150$ | $3-6$ |

## Case Western Reserve University

CLEVELAND, OHIO 44106
A.J. Lohwater, Chairman

Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1090
Baccalaureate Degrees by Department: 30
Master's Degrees by Department: 13

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Geometry and Topology, 3; Logic, 3; Analysis and Functional Analysis, 13, Probability and Statístics, 4; Computer Science and Numerical Analysis, 7; Applied Mathematics, 2. TOTAL: 33

| Fellowship (25) | $2300-3000$ | 9 |  | Teaching |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (15) | $2800-3200$ | 9 | $3-4$ |  |
| Research Assistantship (5) | $2300-2800$ | 9 |  |  |

## Case Western Reserve University

CLEVELAND, OHIO 44106
Harold B. Houser, Chairman
Department of Biometry
Applications must be filed by April 15, 1970
PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 2. TOTAL:2

| Fellowship (1) | 2400 | 12 |  | None | None |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Research Assistantship (2) | $4000-5000$ | 12 | $\$ 2200$ | 20 | Research |

## Case Western Reserve University

CLEVELAND, OHIO 44106
NUMBER OF DEGREES AWARDED IN 1969
Burton V. Dean, Chairman
Baccalaureate Degrees by Institution: 1090
Department of Operations Research
Applications must be filed by March 1, 1970
PH.D. Degrees awarded during last three years by field of specialization: Operations Research, 31; TOTAL: 31

| Fellowship (12) | $1800-2600$ | 9 | No | None |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (4) |  |  |  |  |  |
| Teaching Assistantship (2) | $4050-4450$ | 9 | Yes | 20 | Teaching |
| Research Assistantship (25) | $4050-4450$ | 9 | Yes | Research |  |
| Scholarship (3) | $2400-2600$ | 9 | No | None |  |
| Trainee (3) | $2400-2800$ | 12 | No | NA |  |

## Cleveland State University

CLEVELAND, OHIO 44115
W.R. Van Voorhis, Chairman

Department of Mathematics
Applications must be filed by May 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1017
Baccalaureate Degrees by Department: 34
Master's Degrees by Department: 5
Teaching Assistantship (8) $\quad 2700-3000 \quad 9 \quad 4$

## John Carroll University

CLEVELAND, OHIO 44118
Reverend Raymond W. Allen, Chairman
Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 616
Baccalaureate Degrees by Department: 22
Master's Degrees by Department:
5

| Teaching Assistantship (4) | 2000 | 9 | None | 15 |
| :--- | :--- | :--- | :--- | :--- |

## Kent State University

KENT, OHIO 44240
Richard K. Brown, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3151
Baccalaureate Degrees by Department: 90
Master's Degrees by Department: 10

| Teaching Assistantship (20) | $2500-3000$ | 9 | included | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Miami University

OXFORD, OHIO 45056
Elwood Bohn, Chairman
Department of Mathematics
Applications must be filed by February 1, 1970
NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2150
Baccalaureate Degrees by Department: 80
Master's Degrees by Department: 14

| Fellowship (9) | $2100-3000$ | $9 \& 12$ Waived |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (26) | $2600-3000$ | 9 | Waived | 4 |
| Computing Lab (varies) | Varies | $9 \& 12$ | varies |  |

## Ohio State University

COLUMBUS, OHIO 43210
Arnold E. Ross, Chairman
Department of Mathematics
Applications must be filed by February 16, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 5449
Baccalaureate Degrees by Department: 67
Master's Degrees by Department: 38

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 7; Geometry and Topology, 6; Logic, 1; Analysis and Functional Analysis, 11; Probability and Statistics, 8; Computer Science and Numerical Analysis, 1; Applied Mathematics, 3; Combinatorics,1. TOTAL: 38

| Fellowship (30) | $2400-3000$ | 9 | Waived |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (150) | $2700-3300$ | 9 | Waived | 5 | Teaching |
| Research Assistantship (15) | $2700-3500$ | 9 | Waived | varies | Research |

## Ohio State University

COLUMBUS, OHIO 43210
Marshall C. Yovits, Chairman
Department of Computer \& Information Science Applications for fellowships must be filed by
February 1, 1970 and for assistantships April 15, 1970.

| Fellowship (15) | $2000-2200$ | 9 | None | None |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Teaching Assistantship (25) | 2475 up | 9 | None | 5 | Teaching |
| Research Assistantship (25) | 3300 up | 12 | None | 20 | Research |

## Ohio University

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: . 5449
Baccalaureate Degrees by Department: 41
Master's Degrees by Department: 14

ATHENS, OHIO 45701
Robert G. Helsel, Chairman
Department of Mathematics
Applications must be filed by February 1, 1970
but accepted later if openings still exist.

| Teaching Assistantship (20) | $2600-3600$ | 9 | Waived |
| :--- | :--- | :--- | :--- |
| Scholarship (5) |  | Payable | 5 or 6 |

## University of Akron

AKRON, OHIO 44304
William H. Beyer, Head
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Department: 55
Master's Degrees by Department: 15

## University of Cincinnati

CINCINNATI, OHIO 45221
Edward P. Merkes, Head
Department of Mathematics
Applications must be filed by February 15, 1970
PH.D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 1; Applied Mathematics, 2. TOTAL: 3

| Fellowship (9) | $1500-2000$ | 9 | $\$ 25 /$ qtr | None |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (5) | $2700-3000$ | 9 | $\$ 25 /$ qtr | $3 / 5$ |
| Teaching Assistantship (28) | $2500-2800$ | 9 |  | 6 |
| Scholarship (26) | tuition minus |  |  |  |
|  | $\$ 75$ |  |  |  |
| NASA | $2000-2400$ | 9 |  |  |
| NDEA | $2400-2800$ | 9 |  |  |
| NSF | $2400-2800$ | 9 |  |  |

## University of Dayton

DAYTON, OHIO 45409
K. C. Schraut, Chairman

Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 4948
Master's Degrees by Department: 24

TOLEDO, OHIO 43606
Robert F. Jackson, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1154
Baccalaureate Degrees by Department: 14
Master's Degrees by Department:

| Fellowship (4) | $2500-4000$ | 12 | None |
| :--- | ---: | ---: | ---: |
| Teaching Assistantship (20) | $2500-4000$ | 9 | None |
| Scholarship (4) |  |  | None |

## Wright State University

DAYTON, OHIO 45431
NUMBER OF DEGREES AWARDED IN 1969
Carl C. Maneri, Chairman
Department of Mathematics
Baccalaureate Degrees by Institution: 497
Baccalaureate Degrees by Department: 12
Applications must be filed by March 1, 1970
Teaching Assistantship (8) 2900-3000 $\quad 9 \quad \$ 3.50 / \mathrm{qtr}$ Teaching

## Youngstown State University

YOUNGSTOWN, OHIO 44503 NUMBER OF DEGREES AWARDED IN 1969
Bernard J. Yozwiak, Chairman
Baccalaureate Degrees by Institution: 1400
Department of Mathematics
Applications must be filed by March 15, 1970

| Teaching Assistantship (4-6) | 2600 | 9 | None | $5-6$ |
| :--- | :--- | :--- | :--- | :--- |

## OK LA HOMA

## Oklahoma State University

STILLWATER, OKLAHOMA 74074
John Jewett, Head
Department of Mathematics and Statistics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 4000 Baccalaureate Degrees by Department: 70 Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 4; Geometry and Topology, 3; Analysis and Functional Analysis, 4; Probability and Statistics, 9. TOTAL: 20

| Fellowship (10) | $2400-2800^{*}$ | 12 | None |  |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Teaching Assistantship (70) | $2475-2700$ | 9 | $\$ 12 / \mathrm{sem} . \mathrm{hr}$. | $6-8 \mathrm{sem} \mathrm{hrs./sem}$. |  |
| Research Assistantship (5) | $2475-2700$ | 9 | $\$ 12 / \mathrm{sem} . \mathrm{hr}$. | 20 | Research |

*Plus dependency allowances.

## Oklahoma State University

STILLWATER, OKLAHOMA 74074
Donald D. Fisher, Head
Department of Computing and Information Sciences
Applications must be filed by April, 1970

## University of Oklahoma

NORMAN, OAKLAHOMA 73069
Gene Levy, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2100
Baccalaureate Degrees by Department: 57
Master's Degrees by Department: 35

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 4; Geometry and Topology, 3; Logic, 1; Analysis and Functional Analysis, 5; Applied Mathematics, 1; Mathematical Education,6. TOTAL: 20

| Fellowship (10) | $2400-2800$ | 12 |  |  |  |
| :--- | ---: | ---: | ---: | :--- | :--- |
| Teaching Assistantship (75) | $2400-3000$ | 9 | $\$ 12 / \mathrm{hr}$ | 20 | Teaching |
| Research Assistantship (1) | $2400-2800$ | 9 |  | variable | Research |

## University of Tulsa

TULSA, OKLAHOMA 74104
Thomas W. Cairns, Chairman
Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 796 Baccalaureate Degrees by Department: 26 Master's Degrees by Department: 3

| Teaching Assistantship (6) | $2200-2400$ | 9 | 15 | Teaching |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Scholarship (2) | 500 | 9 |  |  |

## OREGON

## Oregon State University

CORVALLIS, OREGON 97331
David S. Carter, Acting Chairman
Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2473
Baccalaureate Degrees by Department: 135
Master's Degrees by Department: 23

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology 2; Logic, 1; Analysis and Functional Analysis, 4; Probability and Statistics,4;
Computer Science and Numerical Analysis, 2; Applied Mathematics, 10. TOTAL: 25

| Teaching Assistantship (40) | $2475-2875$ | 9 | $\$ 114$ | 15 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Research Assistantship (1-2) | 2800 | 9 | $\$ 114$ | Help Session |  |

## OREGON STATE UNIVERSITY

Oregon State University at Corvallis has programs leading to the M.A., M.S., and Ph.D. degrees in mathematics.
The present research interests of the faculty in pure mathematics are algebraic and differential topology, differential geometry, Riemann surfaces, partial differential equations, convex sets, approximation theory, singular integral operators, harmonic analysis, ergodic theory, operator theory, number theory and matrix theory. Those in applied mathematics are integral equations, numerical analysis, information theory, computer science, mathematical physics, and nonlinear continuum mechanics.
Financial Aid is available in the form of graduate assistantships and fellowships.
For further information and application forms, write to:

> Department of Mathematics
> Graduate Committee
> Oregon State University
> Corvallis, Oregon 97331

TYPE
of financial assistance (with
number anticipated in 1970-1971)

STIPEND
Amount 9 or
(dollars) $\quad 12 \mathrm{mo}$.

TUITION
if not included in stipend

## Oregon State University

CORVALLIS, OREGON 97331
NUMBER OF DEGREES AWARDED IN 1969
Lyle D. Calvin, Chairman
Department of Statistics
Baccalaureate Degrees by Institution: 2473
Master's Degrees by Department:

PH. D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 4. TOTAL: 4

| Fellowship (13) | $2400-2800$ | 12 |  |  |  |
| :--- | ---: | ---: | :--- | :--- | :--- |
| Teaching Assistantship (5) | $2700-3300$ | 9 | $38 /$ term | $12-15$ | Lab Supervision, <br> Consulting |
| Research Assistantship (8) | $2400-3600$ | $9-12$ | $38 /$ term | $12-15$ | Research |

## Portland State College

PORTLAND, OREGON 97207
J. Richard Byrne, Head

Department of Mathematics
Applications must be filed by June 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1449
Baccalaureate Degrees by Department: 60
Master's Degrees by Department: 2
Teaching Assistantship (15) $2800-2800 \quad 9 \quad$ Teaching one four or five credit hour course for the year.

## University of Oregon

EUGENE, OREGON 97403

NUMBER OF DEGREES AWARDED IN 1969
A.F. Moursund, Head

Baccalaureate Degrees by Institution: 2386
Baccalaureate Degrees by Department: 71
Master's Degrees by Department: 52
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 19; Geometry and Topology, 4; Analysis and Functional Analysis, 8; Probability and Statistics, 2. TOTAL: 33

| Fellowship (8) | $2400-2800$ | 12 |  |  |  |
| :--- | ---: | ---: | ---: | :--- | :--- |
| Teaching Assistantship (42) | $2300-3600$ | 9 | 105 | $4-5$ | Teaching |
| Research Assistantship (5) | $2300-3600$ | 9 | 105 | $8-10$ | Research |

## PENNSYLVANIA

## Bryn Mawr College

BRYN MAWN, PENNSYLVANIA 19010
NUMBER OF DEGREES AWARDED IN 1969
J.C. Oxtoby, Chairman

Department of Mathematics
Applications must be filed by February 15, 1970
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department: 7

| Fellowship (1) | 2000 | 9 | included |
| :--- | :--- | :--- | :--- |
| Teaching Assistantship (1) | 2300 | 9 | included |
| Scholarship (2) | 1000 | 9 | included |

## Bucknell University

LEWISBURG, PENNSYLVANIA 17837
Paul Slepian, Chairman
Department of Mathematics

NUMBER OF DEGREES AWARDED in 1969
Baccalaureate Degrees by Institution: 593
Baccalaureate Degrees by Department: 61
Master's Degrees by Department: 98

| Fellowship (2) | 500 | 9 | Remitted | None | None |
| :--- | :---: | :--- | :--- | :--- | :--- |
| Teaching Assistantship (5) | $2000-2200$ | 9 | Remitted | $6-10$ | None |
| Scholarship (4) | None | 9 | Remitted | None | None |

## Carnegie-Mellon University

PITTSBURGH, PENNSYLVANIA 15213
NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 768
Baccalaureate Degrees by Department: 49
Department of Mathematics
Master's Degrees by Department: 19
Applications must be filed by March 15, 1970
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 1; Logic, 1; Analysis and Functional Analysis, 12; Probability and Statistics, 2; Computer Science and Numerical Analysis, 3 ; Applied Mathematics, 3. TOTAL: 25


## Carnegie-Mellon University

PITTSBURGH, PENNSYLVANIA 15213
NUMBER OF DEGREES AWARDED IN 1969
Morris H. DeGrcot, Head
Baccalaureate Degrees by Institution: 768
Department of Statistics
Master's Degrees by Department: 8
Applications must be filed by March 15, 1970
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 2; Logic, 1; Analysis and Functional Analysis, 12; Probability and Statistics, 2; Computer Science and Numerical Analysis, 3; Applied Mathematics, 3. TOTAL: 25

| Fellowship (7) | $1800-2800$ | 9 or |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (8) | $2000-2600$ | 9 | 9 |  | 12 or | | Teaching or |
| :--- |
| Research Assistantship (10) |

## Clarion State College

CLARION, PENNSYLVANIA 16214
Michel G. Ossesia, Chairman
Department of Mathematics
Applications must be filed by August 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 811
Baccalaureate Degrees by Department: 70
Master's Degrees by Department: 1

## Drexel Institute of Technology

PHILADE LPHIA, PENNSYLVANIA 19104
Dale W. Lick, Head
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1230
Baccalaureate Degrees by Department: 35
Master 's Degrees by Department: 7

| Fellowship (8) | $2500-4200$ | 9 or | None |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (25) | $2475-3600$ | 9 or | None | 6 | Teaching |
| Research Assistantship (2) | $2475-3600$ | 9 or | None | 20 | Research |

## Duquesne University

PITTSBURGH, PENNSYLVANIA 15219
Charles F. Sebesta, Chairman
Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1642
Baccalaureate Degrees by Department: 9
Master's Degrees by Department: 6

## East Stroudsburg State College

EAST STROUDSBURG, PENNSYLVANLA 18301
Samuel P. Wallace, Head
NUMBER OF DEGREES AWARDED IN 1969
Department of Mathematics
Applications must be filed by August 1, 1970

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| Research Assistantship (2) | 1200 | 9 | Yes | 15 | Teaching <br> Research |
| :--- | :--- | :--- | :--- | :--- | :--- |

## DREXELINSTITUTEOFTECHNOLOGY

TThe Drexel Mathematics Department offers graduate programs leading to the M. S. and Ph. D. degrees. In addition to the regular masters' degree program is a cooperative M. S. program with cooperating industries during the summers. The Ph. D. program is primarily concentrated in the areas of analysis and applied mathematics. Financial aid is available through teaching and research assistantships, fellowships, and traineeships which carry stipends from $\$ 2,475$ to $\$ 3,600$ and a waiver of tuition and fees.
Interested applicants should request further information from:

> Dr. Dale W. Lick, Head, Mathematics Department
> Drexel Institute of Technology
> Philadelphia, Pennsylvania 19104

TYPE
of financial assistance (with Amount 9 or
number if not included
number anticipated in 1970-1971) (dolliars) 12 mo . in stipend $\mathrm{Hrs} /$ Week Type

## Edinboro State College

EDINBORO, PENNSYLVANIA 16412
NUMBER OF DEGREES AWARDED IN 1969
Glenn W. Olsen, Head
Baccalaureate Degrees by Institution: 800
Department of Mathematics

| Research Assistantship (2) | $1200-2100$ | 9 | $15-20$ | Library |
| :--- | :--- | :--- | :--- | :--- |
| research course |  |  |  |  | assistant

## Indiana University of Pennsylvania

INDIANA, PENNSYLVANIA 15701
NUMBER OF DEGREES AWARDED IN 1969
Melvin R. Woodard, Chairman
Baccalaureate Degrees by Institution: 1206
Baccalaureate Degrees by Department: 175
Master's Degrees by Department: 25

| Teaching Assistantship (10) | $1200-2100$ | 9 mo. No tuition | 15 |
| :--- | :--- | :--- | :--- |

## Kutztown State College

KUTZTOWN, PENNSYLVANIA 19530
Edward W. Evans, Head
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 664
Baccalaureate Degrees by Department: 57
Master's Degrees by Department: 9

| Teaching Assistantship (1) | 1200 | 9. | No |
| :--- | :--- | :--- | :--- |

## Lehigh University

BETHLEHEM, PENNSYLVANIA 18015
NUMBER OF DEGREES AWARDED IN 1969
Everett Pitcher, Chairman
Baccalaureate Degrees by Department:
Department of Mathematics
Applications must be filed by February 15, 1970.
Late applications receive consideration.
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 9; Analysis and Functional Analysis, 12; Probability and Statistics, 1; Computer Science and Numerical Analysis , 1; Applied Mathematics, 1. TOTAL: 26

| Fellowship (14) | $2000-3600$ | $9-12$ | None | 2 | Teaching * |
| :--- | :--- | :--- | :--- | ---: | :--- |
| Teaching Fellowship (8) | 2300 | 9 | None | 2 | Teaching |
| Teaching Assistantship (27) | $2500-2750$ | 9 | None | 4 | Teaching |
| Research Assistantship (2) | 5400 | 12 | 2000 | 20 | Research |

* All fellows teach for additional compensation if terms of the fellowship permit.


## Pennsylvania State University

UNIVERSITY PARK, PENNSYLVANIA 16802
NUMBER OF DEGREES AWARDED IN 1969
Raymond G.D. Ayoub, Head
Department of Mathematics
Baccalaureate Degrees by Institution: 7500
Baccalaureate Degrees by Department: 55
Applications must be filed by February 16, 1970
Master's Degrees by Department: 54
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 11; Geometry and Topology, 3; Logic, 1; Analysis and Functional Analysis, 3; Probability and Statistics, 1; Applied Mathematics, 2. TOTAL: 20

| Fellowship (5) | $2400-2800$ | 9 | None |  |  |
| :--- | :--- | :--- | :--- | ---: | :--- |
| Teaching Assistantship (30) | 2880 | 9 | None | 10 | Teaching |
| Research Assistantship (4) | 2880 | 9 | None | 4 |  |

## Pennsylvania State University

UNIVERSITY PARK, PENNSYLVANIA 16802
NUMBER OF DEGREES AWARDED IN 1969
William L. Harkness, Acting Head
Baccalaureate Degrees by Institution: 7500
Department of Statistics
Master's Degrees by Department: 5
Applications must be filed by March 15, 1970
PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 2. TOTAL: 2

| Fellowship (2) | $\sim 2800$ | 12 |  | Teaching |
| :--- | :---: | :---: | :---: | :---: |
| Teaching Assistantship (7) | $2700-2800$ | 9 | $\leqq 20$ |  |

## Shippensburg State College

SHIPPENSBURG, PENNSYLVANIA 17257
NUMBER OF DEGREES AWARDED IN 1969
James L. Sieber, Chairman
Baccalaureate Degrees by Institution:
809
Department of Mathematics
Baccalaureate Degrees by Department:
Master's Degrees by Department: 10
$\begin{array}{llllll}\text { Teaching Assistantship (2) } & 1800-1800 & 9 & \$ 25 \text { credit } & 20 & \text { Assisting }\end{array}$

## Temple University

PHILADE LPHIA, PENNSYLVANIA 19122
NUMBER OF DEGREES AWARDED IN 1969
A. Schild, Chairman

Department of Mathematics
Baccalaureate Degrees by Department: 64
Applications must be filed by April 1, 1970
Master's Degrees by Department: 9
PH. D. Degrees awarded during last three years by field of specialization: Analysis and Functional Analysis, 1. TOTAL: 1

| Fellowship (8) | $2000-2600$ | 9 | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (25) | $2400-2800$ | 9 | 6 |  |
| Research Assistantship (6) | $2400-2800$ | 9 |  |  |
| Scholarship (4) |  | 9 |  |  |

## Temple University (Medical School)

PHILADE LPHIA, PE NNSYLVANIA 19140
Stanley Schor, Chairman
Department of Biometrics

| Teaching Assistantship (2) | 3000 | 9 |
| :--- | :--- | :--- |

## University of Pennsylvania

PHILADELPHIA, PENNSYLVANIA 19104
Andrew H. Wallace, Chairman
Department of Mathematics
Applications must be filed by February 1, 1970
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 11; Geometry and Topology, 3; Analysis and Functional Analysis, 2; Applied Mathematics, 3. TOTAL: 19

| Fellowship (16) | 2700 | 9 |  |
| :--- | :--- | :--- | :--- |
| Teaching Fellowship (31) | 2700 | 9 | 6 |
| Research Assistantship (3) | 2700 | 9 |  |

## University of Pennsylvania

PHILADELPHIA, PENNSYLVANIA 19104
John W. Carr III, Chairman
Graduate Group in Computer and Information Sciences
Moore School of Electrical Engineering
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Master's Degrees by Department:

| Fellowship (50) | 2000 | variable | tuition pd. |  |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (25) | $2200-2600$ | 9 | tuition pd. | 20 hrs. |$\quad$ Asst. to Prof.

Various other fellowships and scholarships, some supported by industrial organization, carrying stipends of different amount in addition to tuition.

## TEMPLE UNIVERSITY

## ... PHILADELPHIA

offers an MA. and Ph.D. program in Mathematics with specialization in Probability and Mathematical Statistics, in addition to its existing programs in Pure Mathematics.

A limited number of assistantships and fellowships is available.
For further information write to:

> Dr. Albert Schild, Chairman
> Department of Mathematics
> Temple University
> Philadelphia, P. A. 19122

## University of Pittsburgh

PITTSBURGH, PENNSYLVANIA 15213
George Laush, Acting Chairman
Department of Mathematics
Applications must be filed by January 31, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1400
Baccalaureate Degrees by Department: 90
Master's Degrees by Department: 11

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 5; Analysis and Functional Analysis, 11; Computer Science and Numerical. Analysis, 2; Applied Mathematics,1. TOTAL: 19

| Fellowship (6) | $2500-3800$ | $9-12$ | Incl. |  |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (21) | $2600-4500$ | $8-12$ | Incl. | Research Only |
| Teaching Assistantship (21) | $2400-4200$ | $8-12$ | Incl. | Teaching |

## University of Pittsburgh

PITTSBURGH, PENNSYLVANIA 15213
Orrin E. Taulbee, Chairman
Department of Computer Science
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3000
Master's Degrees by Department: 3

| Fellowship (1) | 6000 | 12 | $\$ 1065$ | resident |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Teaching Assistantship (10) |  | 2400 | 8 | $\$ 2400$ non-resident | None |

## Villanova University

VILLANOVA, PENNSYLVANIA 19085
James O. Brooks, Chairman
NUMBER OF DEGREES AWARDED IN 1969
Department of Mathematics
Baccalaureate Degrees by Institution: 1727
Applications must be filed by March 15, 1970
Baccalaureate Degrees by Department: 21
Master's Degrees by Department: 38

| Teaching Assistantship (12) | 2400 | 9 | up to 6 |
| :--- | :--- | :--- | :--- |

## West Chester State College

WEST CHESTER, PENNSYLVANIA 19380
Albert E. Filano, Interim Dean
Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1076
Baccalaureate Degrees by Department: 56
Master's Degrees by Department:

## Wilkes College

WILKES-BARRE, PENNSYLVANIA 18702
Bing K. Wong, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 461
Baccalaureate Degrees by Department: 26

## PUERTO RICO

## University of Puerto Rico

MAYAGUEZ, PUERTO RICO 00708
Eugene A. Francis, Chairman
Department of Mathematics
Applications must be filed by April 30, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 470
Baccalaureate Degrees by Department: 25
Master's Degrees by Department: 8
Teaching Assistantship (15) $\quad 2100-2400 \quad 12 \quad \$ 5 \quad 6 \quad$ Teaching

## RHODE ISLAND

## Brown University

PROVIDENCE, RHODE ISLAND 02912
John Wermer, Chairman
Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 851
Baccalaureate Degrees by Department: 19
Master's Degrees by Department: 23

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 6; Analysis and Functional Analysis, 5; Applied Mathematics, 1. TOTAL: 14

| Fellowship (10) | $2000-2800$ | 9 |  | Teaching |
| :--- | ---: | ---: | ---: | ---: |
| Teaching Assistantship (14) | $2400-2800$ | 9 | $4-7$ |  |
| Research Assistantship (8) | $3800-4800$ | 12 |  |  |

## Brown University

PROVIDENCE, RHODE ISLAND 02912
NUMBER OF DEGREES AWARDED IN 1969
J.P. LaSalle, Chairman

Baccalaureate Degrees by Institution: 851
Baccalaureate Degrees by Department: 33
Division of Applied Mathematics
Master's Degrees by Department:
Applications must be filed by January 15, 1970
PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 5; Applied Mathematics, 27. TOTAL: 32

| Fellowship (30) | Tuition plus | 9 |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | $2300-2800$ |  |  | Teaching |
| Teaching Assistantship (11) | Tuition plus | 9 | 6 | Research |
| Rescarch Assistantship (15) | 2800 | $2550-3900$ | 9 | $\$ 250-1750$ |
|  | Tuition | 9 |  |  |
| Scholarship (2) |  |  |  |  |

## University of Rhode Island

KINGSTON, RHODE ISLAND 02881
V. Lakshmikantham, Chairman

Department of Mathematics
Applications must be filed by March 15,1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1200
Baccalaureate Degrees by Department: 25
Master's Degrees by Department: 8

| Teaching Fellowship (2) | 3000 | 9 | None | Student (full time) |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (14) | 2300 | 9 | None | 5 | Teaching |

## University of Rhode Island

KINGSTON, RHODE ISLAND 02881

William J. Hemmerle
Department of Computer Science and Experimental Statistics

| Teaching Assistantship (5) | 2500 | 9 | 20 |
| :--- | :--- | :--- | :--- |
| Research Assistantship (7) | 2500 | 9 | 20 |

## The Citadel

## SOUTH CAROLINA

CHARLESTON, SOUTH CAROLINA 29409
George E. Reves, Head
Department of Mathematics
Applications must be filed by July 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 475
Baccalaureate Degrees by Department: 15
Master's Degrees by Department: 27

| Fellowship (30)* | None | Nos | None |
| :--- | :--- | :--- | :--- | :--- |

* In-Service Institute for teachers giving the following support: Tuition grant, Approx. $\$ 130.00$ Travel Allowance, book cost.


## Clemson University

CLEMSON, SOUTH CAROLINA 29631
John Kennelly, Head
Department of Mathematics
Applications must be filed by March 1, 1970.
NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 930
Baccalaureate Degrees by Department: 35
Master 's Degrees by Department: 14
PH. D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 2; Analysis and Functional Analysis, 4; Probability and Statistics, 1. TOTAL: 7

| Fellowship (7) |  |  |  |
| :--- | :--- | :--- | :--- |
| Teaching Assistantship (55) | $3600-4000$ | 12 |  |
| Research Assistantship (6) | $3200-3600$ | 12 | $\$ 54 / \mathrm{sem}$. |
| $\$ 54 / \mathrm{sem}$. |  |  |  |

* $\$ 2400$ for 1 st year graduate students, $\$ 2600$ for 2 nd year graduate students, $\$ 2800$ for 3 rd year graduate students, plus $\$ 500$ per dependent.


## University of South Carolina

COL̇UMBIA, SOUTH CAROLINA 29208
James H. Wahab, Head
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1604
Baccalaureate Degrees by Department: 12
Master's Degrees by Department: 35

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Analysis and Functional Analysis, 1; Foundations, 1. TOTAL: 8

| Fellowship (6) | $2000-2800$ | 9 |  | None |  |
| :--- | ---: | :--- | :--- | :--- | :--- |
| Teaching Fellowship (10) | $7200-8200$ | 9 | $\$ 30 /$ sem | 12 | Classroom <br> Teaching or <br> equivalent |
|  |  |  |  | $5 / 6$ | None |

TYPE
of finoncial assistance (with number anticipated in 1970-1:171)

STIPEND

## Amourt 9 or

(dollars) 12 mo .

TUITION
if not included
in stipend Hrs/Week Type

## Winthrop College

ROCK HILL, SOUTH CAROLINA 29730
B. G. Hodges, Chairman

Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 667
Baccalaureate Degrees by Department: 26
Master's Degrees by Department: 1

| Teaching Assistantship (4) | $2400-2800$ | 9 | $\$ 340$ | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

## SOUTH DAKOTA

# Northern State College 

ABERDEEN, SOUTH DAKOTA 57401
Elton Fors, Chairman
Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 597
Baccalaureate Degrees by Department: 28

| Teaching Assistantship (1) | 2000 | 9 | $\$ 228$ | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

# South Dakota School of Mines \& Technology 

RAPD CITY, SOUTH DAKOTA 57701
Dean C. Benson, Head
Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 196
Baccalaureate Degrees by Department: 9
Master's Degrees by Department: 4

| Teaching Assistantship (6) | $2600-2600$ | 9 | $\$ 5 \mathrm{sem} / \mathrm{hr}$ | $4-5$ | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Research Assistantship (1) | $2600-2600$ | 9 | $\$ 5 \mathrm{sem} / \mathrm{hr}$ | Research |  |

## South Dakota State University

BROOKINGS, SOUTH DAKOTA 57006
NUMBER OF DEGREES AWARDED IN 1969
J. E. Richards, Acting Head

Department of Mathematics
Applications must be filed by March 1, 1970

Baccalaureate Degrees by Institution: 740
Baccalaureate Degrees by Department: 39

## UNIVERSITY OF SOUTH CAROLINA

The Department of Mathematics has available for the 1970-71 academic year approximately forty assistantships, from $\$ 2,800$ to $\$ 3,600$, requiring five or six hours per week of classroom teaching or an equivalent amount of service in the department, including assistance with some graduate courses. A limited number of larger stipends, requiring additional work, may be given to capable and highly motivated students whose financial needs prevent their progressing with the usual work-study ratio. Tuition for graduate assistants is $\$ 30$ per semester.

The programs offered lead to the Master of Arts in Teaching Mathematics, Master of Mathematics, Master of Arts, Master of Science and Doctor of Philosophy degrees. The student's program of study is arranged after individual consultation; the master's program,' in particular, is adaptable to a variety of objectives. Doctoral research direction is available in algebra, analysis, topology, logic and foundations. Careful attention will be given to initial advicement and to starting each student in a program commensurate with his training and competence.

Completed applications should be in the graduate school office by March 1. All inquiries are welcome and should be sent to:
J. H. WAHAB, HEAD, DEPARTMENT OF MATHEMATICS UNIVERSITY OF SOUTH CAROLUNA, COLUMBIA, SOUTH CAROLINA 29208

## University of South Dakota

VERMILLION, SOUTH DAKOTA 57069
William E. Ekman, Chairman
NUMBER OF DEGREES AWARDED IN 1969
Department of Mathematics
Applications must be filed by April 1, 1970
Baccalaureate Degrees by Institution: 733
Baccalaureate Degrees by Department: 42
Master's Degrees by Department: 23

| Teaching Assistantship (8-10) | $1800-2400$ | 9 | $1 / 3$ in-state | $4-5$ | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

## TENNESSEE

## Austin Peay State University

CLARKSVILLE, TENNESSEE 37040
William G. Stokes, Chairman
Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 500
Baccalaureate Degrees by Department: 18
Master's Degrees by Department: 3

| Teaching Assistantship (4) | 1500 | 9 | $\$ 255$ | 3 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

## East Tennessee State University

JOHNSON CITY, TENNESSEE 37601
Lester C. Hartsell, Chairman
Department of Mathematics
Applications must be filed by April 30, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1087
Baccalaureate Degrees by Department: 32
Master's Degrees by Department: 9

| Teaching Assistantship (7) | $1800-2025$ | 9 | Yes | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Memphis State University

MEMPHIS, TENNESSEE 38111
H.S. Kaltenborn, Chairman

Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1580 Baccalaureate Degrees by Department: 41
Master's Degrees by Department: 13

| Teaching Assistantship | $20)$ | 2200 | 9 | None | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Middle Tennessee State University

MURFREESBORO, TENNESSEE 37130
Harold S. Spraker, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970.
Late applications will be accepted.

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1122
Baccalaureate Degrees by Department: 41
Master's Degrees by Department: 77

| Teaching Assistantship (8) | 2160 | 9 | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- |

## Tennessee Technological University

COOKEVILLE, TENNESSEE 38501
Ralph C. Boles, Chairman
Department of Mathematics
Applications must be filed by February 15,1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 959
Baccalaureate Degrees by Department: 21
Master's Degrees by Department: 5

| Teaching Assistantship (12) | $2250-2450$ | 9 | None | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

TYPE STIPEND TUITION
of financial assistance (with Amount 9 or if not included SERVICE REQUIRED number anticipated in 1970-1971) (dollars) 12 mo . in stipend $\mathrm{Hrs} /$ Week Type

## University of Tennessee

KNOXVILLE, TENNESSEE 37916
Alston S. Householder, Interim Head
Department of Mathematics
Applications must be filed by February 20 , 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2732
Baccalaureate Degrees by Department: 43
Master's Degrees by Department: 15

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 3; Analysis and Functional Analysis, 6; Probability and Statistics, 3; Computer Science and Numerical Analysis, 2; Applied Mathematics, 1. TOTAL: 17

| Fellowship (18) | $2400-3400$ | $9 \&$ | $\$ 15 / q \operatorname{tr}$. |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | 12 |  |  |  |
| Teaching Fellowship (7) | $3400-4400$ | 9 | $\$ 15 / q \operatorname{tr}$. | $6-4$ | Teaching |
| Teaching Assistantship (50) | $2800-3000$ | 9 | $\$ 15 / q \operatorname{tr}$. | Teaching |  |
| Research Assistantship (2) | 1000 | 9 | $\$ 15 / q \operatorname{tr}$. | Research |  |
| Scholarship (4) | $1600-2500$ | $9 \&$ | $\$ 15 / q \operatorname{tr}$. |  |  |
|  |  | 12 |  |  |  |

## Vanderbilt University

NASHVILLE, TENNESSEE 37203
NUMBER OF DEGREES AWARDED IN 1969
Erik Hemmingsen, Chairman
Baccalaureate Degrees by Institution: 622
Department of Mathematics
Applications must be filed by February 15, 1970
Baccalaureate Degrees by Department: 36
Master's Degrees by Department: 10

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 3; Geometry and Topology, 1; Analysis and Functional Analysis, 1; Computer Science and Numerical Analysis, 1. TOTAL: 6

| Fellowship (10) | $2000-2800$ |  | Waived | $3-6$ | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (10) | 2400 | 9 | Waived | $3-6$ | Teaching |
| Research Assistantship (4) | 2400 | 9 | Waived | $3-6$ | Teaching |
| Scholarship (5) | 2400 | 9 | Waived |  | None |
| M. A.T. (3) | 2400 | 9 | Waived | None |  |

## TEXAS

## East Texas State University

COMMERCE, TEXAS 75428
Dale R. Bedgood, Head
Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2216
Baccalaureate Degrees by Department: 53
Master's Degrees by Department: 15

| Teaching Fellowship (4) | 3200 | 9 | $\$ 79$ | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (12) | 2700 | 9 | $\$ 79$ | 6 | Teaching |

## Midwestern University

WICHITA FALLS, TEXAS 76308
Louie C. Huffman, Chairman
Department of Mathematics
Applications must be filed by April 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 392
Baccalaureate Degrees by Department: 18

## North Texas State University

DENTON, TEXAS 76203
John T. Mahat, Chairman
Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2357
Baccalaureate Degrees by Department: 72
Master's Degrees by Department: 10

| Fellowship (8) | $2400^{*}$ | 12 |  |  | Teaching |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Teaching Assistantship (22) | $2680-3740$ | 9 |  |  |  |

* Additional dependency allowances-\$500.00 each.


## Rice University

HOUSTON, TEXAS 77001
NUMBER OF DEGREES AWARDED IN 1969
Salomon Bochner, Chairman
Baccalaureate Degrees by Institution: 399
Department of Mathematics
Baccalaureate Degrees by Department: 24
Applications must be filed by March 15, 1970
PH. D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 5; Analysis and Functional Analysis, 10. TOTAL: 15
\(\left.\begin{array}{lllll}\hline Fellowship (30) \& 1800-2400 \& 9^{*} \& 6-8 \& Teaching \& <br>

Research Assistantship (5) \& \& 1800-2400 \& 9^{*} \& 6-8\end{array}\right]\)| Research |
| :--- |
| Scholarship (3) |
|  |
|  |
| Correspondingly higher for 12 months. |

## Sam Houston State University

HUNTSVILLE, TEXAS 77340
Glen E. Mattingly, Director
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 788
Baccalaureate Degrees by Department: 19
Master's Degrees by Department: 6

| Fellowship (9) | $2700-3150$ | 9 | $\$ 84$ per. sem. | 15 | Class Assistants <br> and Grading |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship (7) | $2700-3150$ | 9 | $\$ 84$ per. sem. | 6 hrs. | Teaching |
| Junior College | $3150-3150$ | 9 | $\$ 84$ per. sem. | Contact | 6 hrs. |$\quad$ Teaching | Contact |  |
| :--- | :--- |

## Southern Methodist University

DALLAS, TEXAS 75222
David W. Starr, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1039
Baccalaureate Degrees by Department: 34
Master's Degrees by Department: 11

| Fellowship (1) | $1800(9) 2400(12)$ |  | Teaching |
| :--- | :--- | :--- | :--- |
| Teaching Assistantship (7) | $2200(9) 3300(9)$ | $\$ 1400$ | $6-9$ |

## Southern Methodist University

DALLAS, TEXAS 75220
Ronald L. Gue, Director
Computer Science Center
Applications must be filed by January 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1039
Baccalaureate Degrees by Department: 20
Master's Degrees by Department: 85

| $\overline{\text { Fellowship (3) }}$ | $2000-$ | 12 | Full $\$ 700$ | None |
| :--- | :--- | :--- | :--- | :--- |
|  | $2600(\mathrm{yr})$ |  |  |  |
| Research Assistantship (25) | $300-$ | 12 | Full $\$ 700$ |  |
|  | $350(\mathrm{mo})$ |  | $\$ 700$ |  |
| Schrs. $/ \mathrm{wk}$. |  |  |  |  |

## Southern Methodist University

DALLAS, TEXAS 75222
NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1039
Paul D. Minton, Chairman
Master's Degrees by Department:
Department of Statistics
Applications must be filed by March 15, 1970
PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 7. TOTAL: 7

| Fellowship (12) | $2400-$ | 12 | Yes | None |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Research Assistantship (4) | $1800-1800$ | 9 | Yes | Yes | None |

## Stephen F. Austin State University

NACOGDOCHES, TEXAS 75961
W.I. Layton, Head

Department of Mathematics
Applications must be filed by March 1, 1970.
Applicants will be considered after that date
if vacancies exist.

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1249
Baccalaureate Degrees by Department: 33

| Teaching Assistantship (24) | $1500-3000 \cdot 9$ | $\$ 100$ | $3-6$ |
| :--- | :--- | :--- | :--- |

## Texas A \& I University

KINGSVILLE, TEXAS 78363
Virgil C. Kowalik, Chairman
NUMBER OF DEGREES AWARDED IN 1969
Department of Mathematics
Baccalaureate Degrees by Institution: 939
Baccalaureate Degrees by Department: 28
Master's Degrees by Department:

## Texas A \& M University

COLLEGE STATION, TEXAS 77843
H.A. Luther, Chairman

Department of Mathematics
Applications must be filed by July 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1668
Baccalaureate Degrees by Department: 36
Master's Degrees by Department: 9

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Analysis and Functional Analysis, 2; Computer Science and Numerical Analysis, 1. TOTAL: 5

| Fellowship (2) | $2700-3150$ | $9^{*}$ | Yes |  | 6 |
| :--- | :---: | :---: | :---: | :---: | :---: |

## Texas A \& M University

こOLLEGE STATION, TEXAS 77843
NUMBER OF DEGREES AWARDED IN 1969
H.O. Hartley, Director

Institute of Statistics
Master's Degrees by Department: 7

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 22 . TOTAL: 22

| Fellowship (16) | $3600-4800$ | 12 | Yes | $10-20$ |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (11) | $3600-4800$ | 12 | Yes | $10-20$ |
| Research Assistantship (10) | $3600-4800$ | 12 | Yes | $10-20$ |

## TEXAS A \& M UNIVERSITY

The Mathematics Faculty invites interested persons to inquire about its graduate program leading to the M. S. or Ph. D. degrees.
Fields: Algebra, Analysis, Functional Analysis, Numerical Analysis, Topology
Financial Assistance: Fellowships and Assistantships granted by the Department carry stipends ranging from $\$ 2700$ to $\$ 3150$ for nine months, non-resident tuition waived. Apply before July 15, 1970.
Some NSF, NASA, and NDEA grants are available through the University on a competitive basis. Apply before March 15, 1970.
Application: Address all inquiries to
Head, Department of Mathematics
Texas A \& M University
College Station, Texas 77843
of financial assistance (with
number anticipated in 1970-1971)

TUITION

## Texas Christian University

FORT WORTH, TEXAS 76129
Landon A. Colquitt, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1026
Baccalaureate Degrees by Department: 25
Master's Degrees by Department: 12

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 3 ; Geometry and Topology, 9; Analysis and Functional Analysis, 6. TOTAL: 18

| Fellowship (5) | $2400-3600$ | 12 | None | 8 | Research |
| :--- | :--- | :--- | :--- | ---: | :--- |
| Teaching Fellowship (5) | $2400-3600$ | 12 | None | 4 | Teaching |
| Teaching Assistantship (5) | $2125-2750$ | 12 | None | 6 | Teaching |
| Scholarship (2) | None | 12 | None | 8 | Grading |
| Computer Traineeship (3) | $3000-3200$ | 9 | None | 20 | Computer Center |

## Texas Southern University

HOUS'ON, TEXAS 77004
Llayron L. Clarkson, Head
Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 4
Baccalaureate Degrees by Department: 14
Master's Degrees by Department: 1

## Texas Technological University

LUBBOCK, TEXAS 79409
Patrick L. Odell, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3219
Baccalaureate Degrees by Department: 85
Master's Degrees by Department: 9

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Probability and Statistics, 2; Computer Science and Numerical Analysis, 1; Applied Mathematics, 2. TOTAL: 6

| Fellowship (10) | $2600-2600$ | 9 |  | Research |  |
| :--- | :---: | :--- | :--- | :--- | :--- |
| Teaching Assistantship (70) | $2400-2800$ | 9 | out of state <br> tuition waived | 6 | Teaching |
| Scholarship (12) | 600 | 9 |  | Research |  |

## Texas Technological University

LUBBOCK, TEXAS 79409
G.S. Innis, Director

Department of Computer Science
Applications must be filed by June 1970
PH.D. Degrees awarded during last three years by field of specialization: Analysis and Functional Analysis, 2; Probability and Statistics, 4; Computer Science and Numerical Analysis, 1; Applied Mathematics, 1. TOTAL: 8

| Research Assistantship (20) | 2400 | 9 | Yes | 16 | Research |
| :--- | :--- | :--- | :--- | :--- | :--- |

## University of Houston

HOUSTON, TEXAS 77004
James N. Younglove, Chairman
Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3380
Baccalaureate Degrees by Department: 156
Master's Degrees by Department: 13

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Geometry and Topology, 4; Analysis and Functional Analysis, 1. TOTAL: 6

| Fellowship (15) | $2000-3600$ | 9 | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (45) | $2000-3600$ | 9 | 6 |  |
| Research Assistantship (2) | 2500 | 9 |  |  |

## University of Houston

HOUSTON, TEXAS 77004
Elliot I. Organick, Chairmar.
Department of Computer Science

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3380

| Teaching Fellowship (15) | 250 | 9 | Yes | $12-15$ | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Research Assistantship (6) | $250-350$ | $9-12$ | No | 20 | Research |

## University of Texas

AUSTIN, TEXAS 78712
Leonard Gillman, Chairman
Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 4628 Baccalaureate Degrees by Department: 299
Master's Degrees by Department: 22

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 9; Geometry and Topology, 9; Analysis and Functional Analysis, 49; Probability and Statistics, 2; Computer Science and Numerical Analysis, 3; Applied Mathematics, 4; Others, 2. TOTAL: 78

| Fellowship (20) | $1950-3900$ | $9 \& 12$ | Yes |  |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (94) | $2700-3200$ | 9 |  | $10-30$ |
| Research Assistantship (3) | $5520-6780$ | 12 | Yes | $30-40$ |

## University of Texas at Arlington

ARLINGTON, TEXAS 76010
Basil M. Wall, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1053
Baccalaureate Degrees by Department: 138
Master's Degrees by Department: 15

| Fellowship (4) | $2700-2700$ | 9 | $\$ 50 / \mathrm{sem}$. |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (20) | $2700-2700$ | 9 | $\$ 50 / \mathrm{sem}$. | 6 | Teaching |

## UTAH

## Brigham Young University

PROVO, UTAH 84601
H. Gill Hilton, Chairman

Department of Statistics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3618
Baccalaureate Degrees by Department: 7
Master's Degrees by Department: 9

| Fellowship (1) | $1800-2100$ | 9 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (8) | $2200-2450$ | 9 | $\$ 375$ sem. | 20 | None |
|  |  |  |  | Teaching |  |

TYPE
of financial assistance (with number anticipated in 1970-1971)

STIPEND
Amount 9 or (dollars) 12 mo .

TUITION
if not included in stipend $\mathrm{Hrs} /$ Week

## University of Utah

SALT LAKE CITY, UTAH 84112
C. Edmund Burgess, Chairman

Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2158
Baccalaureate Degrees by Department: 64
Master 's Degrees by Department: 5

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 3; Geometry and Topology, 4; Analysis and Functional Analysis, 7; Computer Science and Numerical Analysis, 3. TOTAL: 17
\(\left.\begin{array}{llrl}\hline Fellowship (6) \& 2400-2800^{*} \& 12 \& 2-4 <br>

Teaching Fellowship (6) \& 3000-4000^{* *} \& 12 \& 8\end{array}\right\}\)| Teaching |
| :--- |
| Teaching Assistantship (50) |
|  |
|  |
| Research, and |
| *Plus dependent's allowance |
| ** $\$ 1000-1200$ additional stipend usually available for summer teaching. |

## Utah State University

LOGAN, UTAH 84321
Lawrence O. Cannon, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1366
Baccalaureate Degrees by Department: 12
Master's Degrees by Department: 3

| Teaching Assistantship (20) | $2400-3800$ | 9 | $\$ 426$ | $5-10$ | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Research Assistantship (1) | $2200-2400$ | 9 | $\$ 426$ | 5 | Research |
|  |  |  |  |  |  |

## University of Vermont

BURLINGTON, VERMONT 05401
N. James Schoonmaker, Chairman

Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 950
Baccalaureate Degrees by Department: 70
Master's Degrees by Department: 5

| Fellowship (5) | 1000 | 9 | None |  |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (13) * | 2400 | 9 | 6 | Teaching |
|  |  |  |  |  |

## VIRGINIA

## College of William and Mary

WILLIAMSBURG, VIRGINIA 23185
Thomas L. Reynolds, Head
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 732
Baccalaureate Degrees by Department: 35
Master's Degrees by Department: 8

| Fellowship (2) | $500-3000$ | 9 | Not Paid |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (6) | 2400 | 9 | Paid | 6 | Tutoring, etc. |
| Scholarship (1) | $500-3000$ | 9 | Not Paid |  |  |
|  |  |  |  |  |  |

## Madison College

HARRISONBURG, VIRGINIA 22801
William M. Sanders, Head Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 540
Baccalaureate Degrees by Department: 28
Master's Degrees by Department: 7

| Teaching Assistantship (8) | 3000 | 9 | $\$ 600$ | $3-6$ | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Radford College

RADFORI, VIRGINIA 24141
Valiant W. Mah, Chairman
Department of Mathematics \& Statistics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 766
Baccalaureate Degrees by Department: 45
Master's Degrees by Department: 3

| Fellowship (1) | $334-1000$ | 9 | $\$ 120 / \mathrm{qtr}$. | None |
| :--- | :--- | :--- | :--- | :--- |
| Non-teaching Assistantship (1) | $300-900$ | 9 | $\$ 120 / \mathrm{qtr}$. | $10 \mathrm{hrs} . / \mathrm{wk}$. for $10 \mathrm{wks} . / \mathrm{qtr}$. |
| NDEA | $300-600$ | 9 | $\$ 120 / \mathrm{qtr}$. | None |

## University of Virginia

CHARLOTTESVILLE, VIRGINIA 22903
NUMBER OF DEGREES AWARDED IN 1969
Marvin Rosenblum, Chairman
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department: 11
Master's Degrees by Department: 6
Applications must be filed by February 1, 1970

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 4; Geometry and Topology,6; Analysis and Functional Analysis, 11. TOTAL: 21

| Fellowship (3) | $1500-3000$ | 9 |  | Teaching |
| :--- | ---: | ---: | ---: | :--- |
| Teaching Assistantship (25) | $1500-3200$ | 9 | 6 | Research |
| Research Assistantship (6) | $1500-3000$ | 9 |  |  |
| Scholarship (30) | $500-3000$ |  |  |  |

## University of Virginia

NUMBER OF DEGREES AWARDED IN 1970
Baccalaureate Degrees by Institution: 632
Master's Degrees by Department:
Department of Applied Mathematics \& Computer Science
Applications must be filed by February 1, 1970

PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 1; Applied Mathematics,2. TOTAL: 3

| Fellowship (9) | $2200-3000$ | 9 |  |  |
| :--- | ---: | :--- | :--- | :--- |
| Teaching Assistantship (10) | $1500-2000$ | 9 | $\$ 300$ | 1 section-4 hours |
| Research Assistantship (12) | $950-3000$ | 9 | $\$ 300-\$ 900$ | 10 |

Note: Award is normally a combination teaching-research assistantship paying $\$ 950+\$ 1900=\$ 2850$.

## Virginia Commonwealth University, Health Sciences Center

RICHMONI, VIRGINIA 23219
S.J. Kilpatrick, Jr., Chairman

Department of Biometry
Applications must be filed by April 1, 1970

| Fellowship (2) | $2400-3500$ | 12 | No |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (2) | $2400-3500$ | 12 | Yes | variable | Teaching |
| Research Assistantship (3) | $2400-4000$ | 12 | Yes | variable | Research |

## Virginia Polytechnic Institute

BLACKSBURG, VIRGINIA 24061
Leon Rutland, Jr. , Chairman
Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1766
Baccalaureate Degrees by Department: 29
Master's Degrees by Department: 2

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 3 ; Geometry and Topology, 1; Analysis and Functional Analysis, 2. TOTAL: 6

| Fellowship (6) | $2400-2800$ | 12 | Included |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Teaching Assistantship (35) | $2970-3375$ | 9 | $\$ 495$ | 6 | Teaching |

## Virginia Polytechnic Institute

BLACKSBURG, VIRGINIA 24061
G.W. Gorsline, Head

Department of Computer Science
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1766
Baccalaureate Degrees by Department: 2

| Work (Faculty or |  | either | Yes | $0-1.0000$ |
| :---: | :---: | :---: | :---: | :--- |
| Civil Service) | $(0-10)$ |  | $0-40$ | Teaching and |
|  |  |  | Computer |  |
|  |  | Consulting |  |  |

## Virginia Polytechnic Institute

BLACKSBURG, VIRGINIA 24061
Boyd Harshbarger, Head
Department of Statistics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1766
Baccalaureate Degrees by Department: 10
Master's Degrees by Department: 10
PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics,29. TOTAL: 29

| Fellowship (22) | $2400-3100$ | 12 | Yes | None |
| :--- | :--- | ---: | :--- | :--- |
| Teaching Assistantship (6) | $3015-3378$ | 9 | No | 12 |
| Research Assistantship (2) | $4020-4500$ | 11 |  | 20 |

## WASHINGTON <br> Central Washington State College

ELLENSBURG, WASHINGTON 98926
Robert Y. Dean, Chairman
Department of Mathematics
Applications must be filed by March 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1293
Baccalaureate Degrees by Department: 55
Master's Degrees by Department: 1

$$
1
$$

| Teaching Assistantship (5) | $175-275$ | 9 | \$88-\$157 <br> per. qtr. | $10-20$ | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Eastern W ashington State College

CHENEY, WASHINGTON 99004
Robert G. Thompson, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1050
Baccalaureate Degrees by Department: 36
Master's Degrees by Department: 6
Teaching Fellowship (10) $\quad 2500 \quad 9 \quad 588 /$ qtr $\quad 9$.

## Gonzaga University

SPOKANE, WASHINGTON 99202
NUMBER OF DEGREES AWARDED IN 1969
Zane C. Motteler, Chairman
Baccalaureate Degrees by Institution:
Department of Mathematics
Baccalaureate Degrees by Department: 15
Applications must be filed by April 1, 1970
Master's Degrees by Department: 2

| Fellowship (1) | 0 | 9 | Yes | 4 | Research |
| :--- | :---: | :--- | :--- | :--- | :--- |
| Teaching Assistantship (1) | 1800 | 9 | Yes | 6 | Teaching |

## University of Washington

SEATTLE, WASHINGTON 98105
NUMBER OF DEGREES AWARDED IN 1969
Ross A. Beaumont, Chairman
Baccalaureate Degrees by Institution: 4972
Baccalaureate Degrees by Department: 121
Department of Mathematics
Master's Degrees by Department: 34
Applications must be filed by March 1, 1970
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 16; Geometry and Topology, 5; Logic, 5; Analysis and Functional Analysis, 15; Probability and Statistics, 5. TOTAL: 46

| Fellowship (22) | $2400-3800$ | 12 |  |  | Teaching |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Teaching Assistantship (80) | $3240-3825$ | 9 | $\$ 399$ | 6 | Research |

## University of Washington

SEATTLE, WASHINGTON 98105
Edward B. Perrin, Program Director
Department of Biomathematics Group
PH. D. Degrees awarded during last three years by field of specialization: Biostatistics, 2. TOTAL: 2

| Scholarship (2) | $\$ 360 / \mathrm{mo}$ | 9 or | $\$ 133 /$ qtr. |
| :--- | :--- | :--- | :--- |
|  |  | 12 |  |
| NIGMS Traineeship (12-14) | $\$ 200 / \mathrm{mo}$. | 12 |  |
|  | plus dependent allowance ; supplementation permitted. |  |  |

## Washington State University

PULLMAN, WASHINGTON 99163
T.G. Ostrom, Chairman

Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2058
Baccalaureate Degrees by Department: 45
Master's Degrees by Department: 3

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 5; Geometry and Topology,8; Analysis and Functional Analysis, 5; Probability and Statistics, 1; Applied Mathematics,1. TOTAL: 20

| Fellowship (7) | $2400-2800$ | 12 |  |  |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Teaching Assistantship (34) | $3289.50-$ | 9 | $\$ 198.50$ per | 20 | Teaching |
|  | 3447 |  | semester |  | Research |
| Research Assistantship (4) | $3762-3762$ | 12 | $\$ 198.50$ per | 20 | semester |

## Washington State University

PULLMAN, WASHINGTON 99163

Ottis W. Rechard, Chairman
Department of Computer Science
The Ph. D. in CPT. S was approved in the Fall of 1966. We expect that the first students will receive their Ph. D. 's in the Fall of 1969.

| Fellowship (7) | 6 |
| :--- | ---: |
| Teaching Assistantship (12) | 20 |

Research Assistantship (20)

## Western Washington State College

BE LLINGHAM, WASHINGTON 98225
Joseph Hashisaki, Chairman
Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1218
Baccalaureate Degrees by Department: 43
Master's Degrees by Department: 25

| Teaching Assistantship (10) | 2700 | 9 | payable | 5 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Other (10) | 2000 | 9 or | included |  |  |
|  |  | 12 |  |  |  |
| Academic Year Institute (15) | 3000 | 9 or | included |  |  |

## WEST VIRGINIA

## West Virginia University

MORGANTOWN, WEST VIRGINIA 26506
J.C. Eaves, Chairman

Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1857
Baccalaureate Degrees by Department: 18
Master's Degrees by Department: 11

| Fellowship (4) | $2000-3000$ | 9 |  | $6 \pm 1$ |
| :--- | :---: | :---: | :---: | :---: |
| Teaching Assistantship (25) | $2000-3000$ | 9 | $10 \pm$ | $6 \pm 1$ |

These are Honors Fellows--undergraduate.

## WISCONSIN

## Marquette University

MILWAUKEE, WISCONSIN 53233
C.B. Hanneken, Chairman

Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1504
Baccalaureate Degrees by Department: 61
Master's Degrees by Department: 15

| Teaching Assistantship (11) | $2200-2600^{*}$ | 9 | 6 | Teaching |
| :--- | :--- | :--- | :--- | :--- |
| Research Assistantship (1) | $1900-2300^{*}$ | 9 | 6 | Teaching and/or |
| NSF Traineeship (1) | $2400-2800^{*}$ | 12 | 6 | Research <br> Teaching and <br> Research |

*Stipends presently under review. May be increased.

TYPE
of financial assistance. (with

TUITION
if not included
SERVICE REQUIRED in stipend Hrs/Week Type

## University of Wisconsin

MADISON, WISCONSIN 53706
NUMBER OF DEGREES AWARDED IN 1969
John A. Nohel, Chairman
Department of Mathematics
Baccalaureate Degrees by Institution: 4676
Baccalaureate Degrees by Department: 91
Master's Degrees by Department: 42
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 23; Geometry and Topology, 25; Logic, 7; Analysis and Functional Analysis, 29; Probability ,3; Applied Mathematics, 4; Mathematics and Mathematics Education, 1; Mathematics and Historical Science, 1; TOTAL: 93

| Fellowship (40) | $2000-3400$ | 12 |  | no duties |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Teaching Assistantship (165) | $3555-3690 *$ | 9 | $\$ 263$ | $6-8$ | Instruct \& attend <br> Lecturers |
| Research Assistantship (15)  9 <br> MRC Fellowships (10) $2400-2900$ 12 | $\$ 263$ |  | $1 / 2$ time |  |  |
| no duties |  |  |  |  |  |

*These represent current rates. Rates for 1970-1971 have yet to be woted by the Board of Regents.

## University of Wisconsin

MADISON, WISCONSIN 53706
NUMBER OF DEGREES AWARDED IN 1969
Seymour Parter, Chairman
Baccalaureate Degrees by Institution: 4676
Department of Computer Sciences
Baccalaureate Degrees by Department: 21
Applications must be filed by January 1970
Master's Degrees by Department:
PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 13. TOTAL: 13

| Fellowship (10) | 2700 | 9 |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (43) | $2700-3700$ | 9 | $15-20$ | Teaching |
| Research Assistantship (25) | 2826 | 9 | 20 | Research |
| NSF Trainee (5) | 2400 | 9 |  |  |

## University of Wisconsin

MADISON, WISCONSIN 53706
J. Barkley Rosser, Director

Mathematics Research Center, U.S. Army
Applications must be filed by January 15, 1970

| MRC Fellowships (12) | $2400-2800^{*}$ | 12 |
| :--- | :--- | :--- |
| R.E. Langer Fellowship (3) | $2900-3300^{*}$ | 12 |

*Plus $\$ 500$ allowance for each dependent.

## University of Wisconsin-Milwaukee

MILWAUKEE, WISCONSIN 53217
Edmund H. Feller, Chairman
Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1427
Baccalaureate Degrees by Department: 52
Master's Degrees by Department: 19

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 4; Geometry and Topology, 1; Analysis and Functional Analysis, 3. TOTAL: 8

| Fellowship (22) | $1800-3300$ | 9 |  | 9 | Research |
| :--- | ---: | ---: | :--- | :--- | :--- |
| Teaching Fellowship (5) | $750-1845$ | 9 |  | 3 | Teaching |
|  |  |  | 6 | Research |  |
| Teaching Assistantship (50) | $3555-3690$ | 9 | $\$ 526$ | 9 | Teaching |
| Research Assistantship (1) | 2826 | 9 | $\$ 526$ | 9 | Research |
| Scholarship (6) |  | 9 | $\$ 26$ | 9 |  |
| 4-Yr. Prize Fellow (3) | $3200-3500$ | 12 |  | 9 |  |

## Wisconsin State University

EAU CLAIRE, WISCONSIN 54701
Lawrence Wahlstrom, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 869
Baccalaureate Degrees by Department: 50
Master's Degrees by Department: 1

| Scholarship (2) | 380 | 9 | $\$ 450 / \mathrm{yr}$ |  |
| :--- | :--- | :--- | :--- | :--- |
| Assistantship (2) | 2500 | 9 | (same) out <br> of'state tuition <br> is waived | 20 |

## Wisconsin State University

LACROSSE, WISCONSIN 54601
Arnold I. Temte, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 730
Baccalaureate Degrees by Department: 22
Master's Degrees by Department: 11

| Teaching Fellowship (1) | 2500 | 9 | $\$ 200 / \mathrm{sem}$. |
| :--- | :--- | :--- | :--- |

## Wisconsin State University

RIVER FALLS, WISCONSIN 54022
Lillian Gough, Chairman
Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 592
Baccalaureate Degrees by Department: 58
Master's Degrees by Department: 8

| Teaching Assistantship (10) | $2000-2500$ | 9 | 5 | Teaching |
| :--- | :--- | :--- | :--- | :--- |

TYPE
of financial assistance (with
number anticipated in 1970-1971)

STIPEND
Amount 9 or
(dollars) 12 mo .

TUITION
if not included
in stipend Hrs/Week Type

## WYOMING

## University of Wyoming

LARAMIE, WYOMING 82070
W. Norman Smith, Head

Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1072
Baccalaureate Degrees by Department: 35
Master's Degrees by Department: 12

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; TOTAL: 2

| Fellowship (5) | 2400 plus | 12 | Included |  |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Teaching Assistantship (25) | $2898-3861$ | 9 | Included | $6-8 \mathrm{cr}$. | Teaching |
|  |  |  | hrs. |  |  |
| Research Assistantship (3) | 2898 | 9 | Included | 18 | Research |
| Supply Instructor (3) | 5184 | 9 | $\$ 18$ per hr. <br> above 3 hrs. | 10 | Teaching |

## CANADA

## Carleton University

OTTAWA 1 , ONTARIO, CANADA
I.W. Sida, Chairman

Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1348
Baccalaureate Degrees by Department: 74
Master's Degrees by Department: 6

PH.D. Degrees awarded during last three years by field of specialization: Analysis and Functional Analysis, 1. TOTAL: 1

| Fellowship (2) | $2600-3600$ | 12 | $\$ 440$ |  | Teaching |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Teaching Fellowship (3) | 2400 | 9 | $\$ 440$ | 6 | Teaching |
| Teaching Assistantship (10) | $2250-3250$ | 9 | $\$ 440$ | 6 |  |
| Scholarship (9) | $1300-3600$ | 12 | $\$ 440$ |  |  |

## Dalhousie University

HALIFAX,N.S., CANADA
A.J. Tingley, Chairman

Department of Mathematics

NUMBER OF DEGREES ÁWARDED IN 1969
Baccalaureate Degrees by Institution: 600
Baccalaureate Degrees by Department: 30 Master's Degrees by Department: 8

PH.D. Degrees awarded during last three years by field of specialization: Geometry and Topology,1. TOTAL: 1

| Teaching Assistantship (15) | $2000-4000$ | 12 | $\$ 558$ | $3-6$ | Paper Grading <br> or Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Scholarship (3) | $3000-5500$ | 12 | $\$ 558$ |  |  |

## Lakehead University

PORT ARTHUR, ONTARIO, CANADA
Clement F. Kent, Chairman
Department of Mathematics
Applications must be filed by September 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 165
Baccalaureate Degrees by Department: 17
Master's Degrees by Department: 1

| Fellowship (3) | $3500-4500$ | 12 | $\$ 500$ | $0-3$ |
| :--- | ---: | ---: | :--- | :--- |
| Teaching Fellowship (4) | $3000-3500$ | 9 | $\$ 500$ | 3 |

## McGill University

MONTREAL, QUEBEC, CANADA

NUMBER OF DEGREES AWARDED IN 1969
E. Rosenthall, Chairman

Baccalaureate Degrees by Institution: 1050
Department of Mathematics
Baccalaureate Degrees by Department: 53
Applications must be filed by March 1, 1970
Master's Degrees by Department:
24

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 12; Geometry and Topology, 3; Analysis and Functional Analysis, 1; Probability and Statistics, 3; Applied
Mathematics,1. TOTAL: 20

| Fellowship (5) | $2000-3500$ | 9 | $\$ 640$ | None |
| :--- | ---: | ---: | :--- | :--- |
| Post-Doctoral Fellowship (5) | $6000-7200$ | 12 |  |  |
| Teaching Assistantship (25) | $2550-4700$ | 8 | $\$ 640$ | 3 or 6 |
| Research Assistantship(40) | $2000-3000$ | 12 |  | 6 |
| Demonstrators (60) | $425-1500$ | 8 | $\$ 640$ | 3 or 6 |

## McMaster University

HAMILTON, ONTARIO, CANADA
T. Husain, Chairman

Department of Mathematics
Applications must be filed by September 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1177
Baccalaureate Degrees by Department: 39
Master's Degrees by Department: 2

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Analysis and Functional Analysis, 2; Graph Theory, 2. TOTAL: 10

| Teaching Fellowship (60) | $3800-4000$ | 12 | $\$ 403$ 1st year | $8-10$ |
| :--- | :--- | :--- | :--- | :--- |

## Memorial University of Newfoundland

ST. JOHN'S, NEWFOUNDLAND, CANADA
W.J. Blundon, Head

Department of Mathematics
Applications must be filed by June 30, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 800
Baccalaureate Degrees by Department: 50
Master's Degrees by Department: 2

| Fellowship (6) | $2500-3600$ | 12 | $\$ 500$ | 3 | Various |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Queen's University at Kingston

KINGSTON, ONTARIO, CANADA
A.J. Coleman, Head

Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 983
Baccalaureate Degrees by Department: 37
Master's Degrees by Department: 13

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 5; Geometry and Topology, 1. TOTAL: 6

| Teaching Fellowship (40) | $3300-3800$ | 12 | $\$ 500$ | 10 |
| :--- | :--- | :--- | :--- | :--- |
| Scholarship (8) | $3300-3800$ | 12 | $\$ 500$ | 10 |

TUITION
if not included in stipend Hrs/Week

## Simon Fraser University

BURNABY 2, B. C. , CANADA

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 572
A.H. Lachlan, Acting Head

Department of Mathematics
Applications must be filed by March 1, 1970
Baccalaureate Degrees by Department: 15
Master's Degrees by Department: 2
PH.D. Degrees awarded during last three years by field of specialization: Logic, 1. TOTAL: 1

| Teaching Assistantship (20) | $2300-2700$ | $8^{*}$ | $\$ 150 /$ sem. ${ }^{* *}$ | 15 | Teaching, |
| :--- | :--- | :---: | :--- | :--- | :--- |
| Scholarship (5) | 3600 | 12 | $\$ 150 /$ sem. | Grading |  |

*Many extendable to 12 months with $\$ 1000$ research assistantship.
** Fees reduce to $\$ 20$ per semester during the second year of studies.

## Université de Montréal

MONTREAL 161,QUÉBEC, CANADA
Jean Maranda, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2324
Baccalaureate Degrees by Department: 115
Master's Degrees by Department: 22

PH.D. Degrees awarded during last three years by field of specialization: Argebra and Number Theory, 3; Geometry and Topology, 1; Logic, 1; Analysis and Functional Analysis, 5; Probability and Statistics, 2 . TOTAL: 12

| Fellowship (7) |  |  |  |
| :--- | ---: | ---: | ---: |
| Teaching Fellowship (10) | $8000-9000$ | 12 | $10 \mathrm{hr} . / \mathrm{wk}$. |
| Teaching Assistantship (5) | $900-2500$ | 9 | $2 \mathrm{hr} . / \mathrm{wk}$. |
| Scholarship (88) | $2500-3500$ | 9 |  |

## Université de Montréal

MONTRÉAL 101, QUÉBEC, CANADA
NUMBER OF DEGREES AWARDED IN 1969
Pierre Robert, Chairman
Department of Computer Science
Applications must be filed by different dates according to grants specifications.

Baccalaureate Degrees by Institution: 2324
Master's Degrees by Department:

| Fellowship (1) | $5000-8000$ | 12 | $\$ 550$ |
| :--- | ---: | ---: | :--- |
| Teaching Fellowship (2) | $5000-6500$ | 9 | $\$ 550$ |
| Teaching Assistantship (100) | $900-1100$ | 9 | $\$ 550$ |
| Research Assistantship (6) | $4000-8000$ | 12 | $\$ 550$. |
| Scholarship (40) | $875-1375$ | 9 | $\$ 550$ |
| Total |  |  |  |

TYPE
of financial assistance (with
number anticipated in 1970-1971)

STIPFND

## Ámount 9 or

 (dollars) 12 mo .TUITION
if not included
in stipend $\mathrm{Hrs} /$ Week Type

## University of Alberta

EDMONTON, ALBERTA, CANADA
NUMBER OF DEGREES AWARDED IN 1969
W. Al-Salam, Acting Chairman

Baccalaureate Degrees by Institution: 2982
Baccalaureate Degrees by Department: 11
Master's Degrees by Department: 8
PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 4; Geometry and Topology, 1; Analysis and Functional Analysis, 3; Applied Mathematics, 1. TOTAL: 9


## University of Alberta

EDMONTON, ALBERTA, CANADA

D. B. Scott, Chairman

NUMBER OF DEGREES AWARDED IN 1969
Department of Computing Science
Baccalaureate Degrees by Department:
26
Applications must be filed by March 1, 1970

| Teaching Assistantship (30) | 3000 | 8 |  | 12 |
| :--- | :--- | ---: | :--- | :--- |
| Research Assistantship (30) | 3000 | 12 | $\$ 500$ | Teaching |
| Scholarship (10) | $3000-3600$ | 12 | $\$ 500$ |  |

## THE UNIVERSITY OF ALBERTA

## Graduate Study in Mathematics <br> to the M.Sc. or Ph.D. degree

[^2]
## University of British Columbia

VANCOUVER 8, B.C., CANADA
R.D. James, Chairman

Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3121
Baccalaureate Degrees by Department: 200
Master's Degrees by Department: 11

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 9; Geometry and Topology, 2; Analysis and Functional Analysis, 8; Probability and Statistics, 1; Computer Science and Numerical Analysis, 1; Applied Mathematics, 2. TOTAL: 23

| Teaching Assistantship (85) | $1500-3000$ | 8 | $\$ 355$ | $4-12^{*}$ | Teaching, Grading |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Scholarship (35) | $2000-3600$ | 12 | $\$ 355$ |  |  |

* 0-3 of these are formal lectures hours.


## University of British Columbia

VANCOUVER 8, B. C., CANADA
J.E.L. Peck, Head

Department of Computer Science
Applications must be filed by July 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3121
Master's Degrees by Department: 4

| Teaching Assistantship (8) | 2550 | 9 | $\$ 355$ | 6 | Teaching |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Research Assistantship (4) | 3000 | 12 | $\$ 355$ | 12 | Research |

## University of Calgary

CALGARY 44, ALBERTA, CANADA
Hanafi K. Farahat, Head
Department of Mathematics, Statistics and
Computing Science
Applications must be filed by March 31, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1110
Baccalaureate Degrees by Department: 32
Master's Degrees by Department: 7

PH.D. Degrees awarded during last three years by field of specialization: Analysis and Functional Analysis,1; Computer Science and Numerical Analysis, 1. TOTAL: 2
\(\left.$$
\begin{array}{llllll}\hline \text { Teaching Assistantship (40) } & 2400-3600 & 8^{*} & \text { Included } & 6-12 & \begin{array}{l}\text { Tutorials and } \\
\text { Grading }\end{array}
$$ <br>

Research Assistantship (5) \& 2000-2400^{* *} \& 8^{*} \& Included \& \& Research\end{array}\right\}\)| Scholarship (2) |
| :--- |
| Service Assistantships (10) |
| 3600 |
| Post Doctoral (6) |

*Additional research grants of $\$ 1000$ are available for students working on their programme during the four summer months.
** Tax free.

## University of Guelph

GUELPH, ONTARIO, CANADA
NUMBER OF DEGREES AWARDED IN 1969
T.D. Newton, Chairman

Baccalaureate Degrees by Institution: 929
Baccalaureate Degrees by Department: 10
Master's Degrees by Department: 1

|  |  | 12 | $\$ 400$ | $12-15$ | Lab. Instruction |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (12) | 3300 | 3300 | 12 | $\$ 400$ | $12-15$ |

## University of Manitoba

WINNIPEG 19, MANITOBA, CANADA
N.S. Mendelsohn, Head

Department of Mathematics and Astronomy

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2661
Baccalaureate Degrees by Department: 101
Master's Degrees by Department: 4

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theo:y, 1. TOTAL: 1

| Fellowship (8) | $2000-3000$ | 8 | $\$ 425 / \mathrm{yr}$. |  |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
|  | $3000-4000$ | 12 |  | 4 | Teaching |
| Teaching Fellowship (20) | 3000 | 8 | $\$ 425 / \mathrm{yr}$. | Teaching |  |
| Teaching Assistantship (10) | 2000 | 8 | $\$ 425 / \mathrm{yr}$. | 4 |  |

## University of Manitoba

WINNIPEG 19, MANITOBA, CANADA

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2661
B.K. Kale, Acting Head

Baccalaureate Degrees by Department: 9
Department of Statistics
Applications must be filed by March 1, 1970
Master's Degrees by Department:

| Teaching Assistantship (8) | $1600-2400$ | 9 | $\$ 400-\$ 450$ | $2-6$ |
| :--- | :--- | :--- | :--- | :--- |
| Research Assistantship (8) | $1600-2400$ | 9 | $\$ 400-\$ 450$ | $2-6$ |

## THE UNIVERSITY OF CALGARY

## Graduate Study in Pure \& Applied Mathematics, Statistics \& Computing Science

This rapidly expanding University is situated within easy access to beautiful climbing and ski areas in the Rocky Mountains. The library already has over 275,000 volumes and subscribes to over 6,500 periodicals including 250 mathematical periodicals with back runs.

The department offers programmes leading to the M.A., M.Sc., and Ph.D. degrees. There are presently over 50 faculty members in the department with active research interests in algebra, analysis, functional analysis, combinatorics, logic, set theory, differential geometry, number theory, numerical analysis, continuum mechanics, relativity, multivariate analysis, probability, stochastic processes, artificial intelligence, automata theory, algorithmic languages, machine logic.

Teaching, service and research assistantships are available in the department and each applicant for graduate study will be considered for these. The average stipend is $\$ 3,000$ for the 8 month session. Fees are waived. In addition, students working on their programme during the summer months may receive an additional $\$ 1,000$.

For further information and details write to:

> Professor E. C. Milner
> Director of Graduate Studies
> Department of Mathematics, Statistics \& Computing Science
> The University of Calgary
> Calgary 44, Alberta, Canada

## University of New Brunswick

FREDERICTON, NEW BRUNSWICK, CANADA
L. P. Edwards, Head

Department of Mathematics
Applications must be filed by December 31, 1969

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 887
Baccalaureate Degrees by Department: 25
Master's Degrees by Department: 2

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1. TOTAL: 1

| Fellowship (6) | 2000 | 9 | $\$ 400$ |  | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (2) | 3500 | 9 | $\$ 400$ | 5 | Teaching |
| Tutorial Instr. (10) | 1000 | 9 | $\$ 400$ | 2 |  |

## University of New Brunswick

FREDERICTON, NEW BRUNSWICK, CANADA
W. Dana Wasson, Head

Department of Computer Science
Applications must be filed by March 17, 1970

| Fellowship (3) | $2000-3000$ | 9 | $\$ 400$ |  |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (12) | $1000-2000$ | 9 | $\$ 400$ | $4-8$ |
| Research Assistantship (4) | 2000 | 9 | $\$ 400$ |  |

## University of Ottawa

OTTAWA, ONTARIO, CANAIA

V. Linis, Chairman

Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 900
Baccalaureate Degrees by Department: 5
Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Logic, 1; Analysis and Functional Analysis, 1 ; Computer Science and Numerical Analysis, 1. TOTAL: 3

| Teaching Assistantship (5) | $2000-3000$ | 9 | $\$ 450$ | 4 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Research Assistantship (1) | 3000 | 9 |  | 6 | Research |
| Demonstrat.(8) | $1200-2000$ | 8 | $\$ 450$ | 4 | Teaching |

## University of Saskatchewan

SASKATOON, SASKATCHEWAN, CANADA

NUMBER OF DEGREES AWARDED IN 1969
Carman E. Miller, Head
Baccalaureate Degrees by Institution: 2013
Department of Mathematics
Applications must be filed by March 15, 1970
PH.D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 1; Probability and Statistics,1. TOTAL: 2

| Teaching Fellowship (9) | $2500-3500$ | 12 | $\$ 425$ | $3-5$ | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (2) | 4500 | 12 | $\$ 425$ | 6 | Teaching |
| Research Assistantship (6) | $2000-3000$ | 12 | $\$ 425$ |  |  |

## University of Saskatchewan, Regina

REGINA, CANADA
C. L. Kaller, Chairman

Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGRFES AWARDED IN 1969
Baccalaureate Degrees by Institution: 529
Baccalaureate Degrees by Department: 50
Master's Degrees by Department: 4

| Teaching Fellowship (4) | $3600-3600$ | 12 | $\$ 425$ | 5 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (6) | $3000-3000$ | 12 | $\$ 425$ | 10 | Grading, etc. |
| Scholarship (bursary) (2) | $3600-3600$ | 12 | $\$ 425$ |  |  |
| Other (10)* | $2000-3600$ | 12 | $\$ 425$ |  |  |

*'These are from N. R.C. funds made available to staff members who then support graduate students as their own research assistants.

## University of Toronto

TORONTO 181, CANADA
G.F.D. Duff, Chairman

Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3741
Baccalaureate Degrees by Department: 25
Master's Degrees by Department: 23

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Geometry and Topology, 6; Logic, 1; Analysis and Functional Analysis, 7; Probability and Statistics, 10 ; Applied Mathematics, 3. TOTAL: 28

| Fellowship (55) | $2000-5000$ | 12 | $\$ 475$ | 4 | Demonstrating |
| :--- | ---: | ---: | ---: | ---: | :--- |
| Teaching Assistantship (30) | $2000-2750$ | 8 | $\$ 475$ | $\$ 475$ |  |

## University of Toronto

TORONTO 181, ONTARIO, CANADA
Thomas E. Hull, Chairman
Department of Computer Science
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3741
Baccalaureate Degrees by Department: 20
Master's Degrees by Department:

PH. D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 6. TOTAL: 6

| Fellowship | 3000 | 12 | $\$ 475$ | 4 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Fellowship | $3800-5100$ | 12 | $\$ 395$ |  | Tutoring |
| Teaching Assistantship | $3600-3600$ |  |  | Demonstrating |  |
| Research Assistantship | $3600-3600$ | 12 | $\$ 396$ | 4 |  |

## University of Victoria

VICTORIA, B.C., CANADA
S.A. Jennings, Chairman

Department of Mathematics
Applications must be filed by February 21, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 450
Baccalaureate Degrees by Department: 41

| Teaching Fellowship | $1400-2400$ | 8 | $\$ 450$ | 4 |
| :--- | :---: | :---: | :---: | :---: |
| Research Assistantship | $2400^{*}$ | 8 | $\$ 450$ |  |
|  |  |  |  |  |
|  |  |  |  |  |
| In addition, there is $\$ 1000$ |  |  |  |  |

## University of Waterloo

WATERLOO, ONTARIO, CANADA
NUMBER OF DEGREES AWARDED IN 1969
W. F. Forbes, Acting Dean

Faculty of Mathematics
Baccalaureate Degrees by Institution: 1167
Baccalaureate Degrees by Department: 152
Master's Degrees by Department: 46
PH. D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 2; Analysis and Functional Analysis, 1; Probability and Statistics,3; Computer Science and Numerical Analysis, 3; Applied Mathematics, 2. TOTAL: 11

| Teaching Fellowship (192) | $1000-2000$ | 8 | $\$ 466$ | 5 | Teaching |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Research Assistantship (92) | $1000-3000$ | $8 / 12$ | $\$ 466$ | $5 / 10$ | 10 |
| Scholarship (50) | 3600 | 12 | $\$ 466$ |  |  |

## University of Western Ontario

LONDON, ONTARIO, CANADA
D. Borwein, Head

Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1898
Baccalaureate Degrees by Department: 36
Master's Degrees by Department: 4

PH.D. Degrees awarded during last three years by field of specialization: Analysis and Functional Analysis, 4; Probability and Statistics, 1; Computer Science and Numerical Analysis, 2. TOTAL: 7

| Fellowship (11) | $2200-3000$ | 8 | $\$ 137 /$ term |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Teaching Assistantship (10) | 500 | 8 | $\$ 137 /$ term | 1 | Tutor |
| Research Assistantship (5) | 3000 | 12 | $\$ 137 /$ term | $1-6$ | Research |
| Scholarship (9) | $1500-3600$ | $8-12$ | $\$ 137 /$ term |  |  |

# UNIVERSITY OF VICTORIA <br> Victoria, B. C., Canada <br> <br> Department of Mathematics 

 <br> <br> Department of Mathematics}

## Mathematics Department Head:

The University is seeking an established senior colleague to head a growing thirty member department. The department offers an undergraduate major and honours programme, and has begun a graduate programme in the areas of Pure Mathematics, Applied Mathematics, Statistics, and Computing Science.

Applicants should have suitable experience in university teaching, mathematical research, and administration.

Applications will be received until January 9, 1970.
Duties to commence July 1, 1970.
Applications including curriculum vitae or requests for further information should be sent to:
Dr. L. A. Hinrichs
Chairman, Head Selection Committee
Department of Mathematics
University of Victoria
P. O. Box 1700

Victoria, B. C., Canada

## University of Western Ontario

LONDON 72, ONTARIO, CANADA
J.H. Blackwell, Chairman

Department of Applied Mathematics
Applications must be filed by January 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Applied Mathematics, 1. TOTAL: 1

| Teaching Fellowship (1) | 3000 | 9 | 12 |  |
| :--- | :---: | :---: | :---: | :--- |
| Teaching Assistantship (2) | $2000-3000$ | 9 | $8-12$ | Marking |
|  |  |  |  |  |
| Research Assistantship | $500-3000$ | 12 | Marking |  |
| Scholarship NRC (6) | $3000-3600$ | 12 | Research |  |
| Scholarship OGF (5) | 2250 | 12 |  |  |

## University of Windsor

WINDSOR 11, ONTARIO, CANADA

NUMBER OF DEGREES AWARDED IN 1969
Rev. D.T. Faught, Head
Baccalaureate Degrees by Institution: 1250
Department of Mathematics
Applications must be filed by April 1, 1970

Baccalaureate Degrees by Department: 55 Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 2; Applied Mathematics, 2. TOTAL: 4

| Teaching Fellowship (20) | $2500-4000$ | 9 | $\$ 470$ | Presiding at |
| :--- | :--- | :--- | :--- | :--- |

## THE UNIVERSITYOF WATERLOO FACULTY OF MATHEMATICS

Graduate Studies leading to Degrees of M. Math.; M. Phil.; Ph. D. DEPARTMENTS: Applied Mathematics, Pure Mathematics, Combinatorics and Optimization, Applied Analysis and Computer Science, Statistics.
TEACHING FELLOWSHIPS AND RESEARCH ASSISTANTSHIPS:
Combined values: $\$ 2000-\$ 3000$ for 8 months and up to $\$ 1500$ for the summer term.

APPLY TO: Associate Dean of Graduate Studies<br>Faculty of Mathematics<br>The University of Waterloo<br>Waterloo, Ontario, Canada

## TAX STATUS OF GRANTS

Under Section 117 of the Internal Revenue Service Code assistantships, fellowships and grants meeting certain conditions are excludable from gross income and therefore not subject to the Federal Income Tax. The Internal Revenue Service has given the following interpretation of Section 117.
"Section 117(a) of the Internal Revenue Code of 1954 permits an individual to exclude from his gross income amounts received as a scholarship or fellowship grant. Whether the amounts received are in fact a scholarship or fellowship grant, i.e., are paid for the primary purpose of furthering the recipient's education and training, is a conclusion reached by the Internal Revenue Service on the basis of the facts in a particular case.
"Section 117 (b) (1) of the Code provides that in the case of individuals who are candidates for a degree the exclusion from gross income shall not apply to that portion of any amount received as payment for teaching, research, or other services in the nature of part-time employment required as a condition to receiving the scholarship or fellowship grant. However, if teaching, research, or other equivalent services are required of all candidates for a particular degree as a condition to receiving the degree, such teaching, research or other services shall not be regarded as part-time employment.
"In situations where research is required of all degree candidates, but only those students who engage in teaching receive stipends, the Service would conclude that the stipend was not excludable under Section $117(a)$ of the Code, but was paid for services rendered in the nature of part-time employment.
"If research and teaching services are required of all degree candidates and such research and services are performed for the primary purpose of furthering the students' education and training, the Service would conclude that stipends paid for the research and teaching services, required of all degree candidates, are excludable from the recipients' gross income under Section 117(a) of the Code. However, amounts paid to a degree candidate for teaching services not strictly required as a condition to receiving the degree for which the recipient is a candidate, at the time he performs the service, represents compensation for services rendered which is includable in the recipient's gross income."

To help expedite the processing of returns, two forms are given below showing the types of information which should be provided by the graduate school for the Internal Revenue Service to help determine the validity of the claimed tax exclusion.

Application for total exclusion of stipend from gross income:

## TO WHOM IT MAY CONCERN:

During the calendar year 19 $\qquad$ served as a Research Assistant in the Department of $\qquad$ at the University from to $\qquad$ . He was paid a stipend of \$ $\qquad$ for his services. The funds were derived from $\qquad$ -
At the same time, he was a candidate for the degree of $\qquad$ - The research which he performed under this arrangement met, in part, the requirements for this degree.

Equivalent research is required of all students working for this same degree at the University, regardless of whether or not they are compensated for their services.

TO WHOM IT MAY CONCERN:
During the calendar year 19—
(Name of Student) served as a (position) in the Department of $\qquad$ at the $\qquad$ University from $\qquad$ to $\qquad$ - He was paid a stipend of $\$$ $\qquad$ . The funds were derived from $\qquad$ - At the same time, he was a candidate for the degree of $\qquad$ . During this period the candidate spent approximately (a) $\qquad$ per cent of his working time $\qquad$ (assigned duties) , which is not required for the degree, and (b) $\qquad$ per cent of his time on degree requirements. The research or study which he performed under (b) met in part the requirements for his degree. Equivalent research is required of all students working for this same degree at the $\qquad$ University, regardless of whether or not they are compensated for their services.

## SELECTED LIST OF STIPENDS

## I. Graduate Fellowships and Loan Sources

Ames Laboratory. Graduate assistantships in applied mathematics and computer science. Direct inquiries to Dr. Clair G. Maple, Chief, Mathematics and Computer Science Division, Ames Laboratory of the U.S. Atomic Energy Commission, Iowa State University, Ames, Iowa 50010.

Boris A. Bakhmeteff Research Fellowship in Mechanics of Fluids. A Boris A. Bakhmeteff Research Fellowship will be available for the $1970-71$ academic year in an amount up to $\$ 3,600$. It is intended to be a specific contribution for a definite research project of an original and creative nature in the general field of mechanics of fluids. The recipient shall be a graduate student who is a candidate for the master's or doctor's degree. He shall have no commitment that will interfere with the research work and study on a full-time basis. It is expected that the stipend will be applied principally toward fees, tuition, and subsistence. The study and research may be undertaken at an institution of the Fellow's choice. In the judgment of the Committee, the adequacy of the facilities of the institution will have substantial weight in the selection of the Fellow. Application forms should be filed by February 15, 1970, with Dean William Allan, School of Engineering, The City College of The City University of New York, New York 10031.

Center for Naval Analyses, 1970 Summer Employment. CNA, operated under contract with the University of Rochester, is engaged in a broad spectrum of operations research and systems analysis studies for the U. S. Navy and other government agencies. Opportunities are available for graduate students in operations research, economics, engineering, mathematics, physics, and statistics. Assignments include analysis related to force level planning, manpower, logistics, and operational effectiveness. U. S. citizenship required. Write to Mr. Terry D. Harris, Center for Naval Analyses, 1401 Wilson Boulevard, Arlington, Virginia 22209.

Danforth Graduate Fellowships. Citizenship unrestricted. Open to men and women under 30 years of age who are seniors or recent graduates of accredited colleges in the United States, with no previous graduate study, and who intend to teach at the college level. Tenable at any accredited U. S. university. Must be nominated by liaison officer of college or university. See the liaison officer on campus or, for general information, write to Dr. John H. Chandler, Director, Graduate Fellowship Program, The Danforth Foundation, 222 South Central Avenue, St. Louis, Missouri 63105.

General Electric Foundation. Provides research and study grants to selected departments of selected graduate institutions on a programmed, rotational basis, to be used by the department in a number of ways, including fellowships and teaching assistantships. Write to J. Moreau Brown, Crotonville, P. O. Box 791, Ossining, New York.

Daniel and Florence Guggenheim Fellowships. For U. S. or Canadian residents interested in jet propulsion, space flight, and flight structures. Graduate fellowships at specified institutions. Write to Daniel and Florence Guggenheim Foundation, 120 Broadway, New York, New York 10005.

Hughes Aircraft Company Doctoral, Engineer and Masters Fellowship Programs. Academic training leading to these degrees and correlated experience developed through professional work assignments. Over 100 new awards each year in various fields of engineering, mathematics, and physics. Value of awards, including salary associated with work assignments, ranges from approximately $\$ 7,500$ to $\$ 12,000$ annually. Write to Scientific Education Office, Hughes Aircraft Company, P. O. Box 90515 , Los Angeles, California 90009.

Johns Hopkins University. (1) Financial support for students taking the Ph.D. in mathematical statistics is available in the form of NSF and USPHS traineeships, NDEA fellowships, and research assistantships. Inquiries should be addressed to Chairman, Department of Statistics, The Johns Hopkins University, Baltimore, Maryland 21218. (2) USPHS traineeships are available to students seeking the Sc.M., Sc.D., or Ph.D., in biostatistics. Applicants for the biostatistics programs should have one year of biological, physical, or social science in addition to preparation in mathematics. Address inquiries to Chairman, Department of Biostatistics, School of Hygiene and Public Health, 615 North Wolfe Street, Baltimore, Maryland 21205.

Kappa Kappa Gamma Fraternity Fellowships. \$500 each. Approximately 14 awards are available to women under 30 years of age who may or may not be fraternity members. A bachelor's degree is necessary from an institution where a chapter of Kappa Kappa Gamma is located, or graduate work must be taken on a campus where a chapter is located. U. S. or Canadian citizenship required. First year graduate students receive preference. Candidate must receive no more than $\$ 1,000$ of additional financial aid. Not renewable. Application forms are available from Dr. Miriam Locke, Chairman of Fellowships, Kappa Kappa Gamma Fraternity, Box 1484, University, Alabama 35486. Applications must be completed by March 1.

Kent Fellowships. Purpose is to encourage and support persons who are preparing for teaching or administration in colleges and universities. Open to men and women to age 40 . A minimum of one year of previous graduate study is required at the time of application. Fields unrestricted. A maximum of 50 awards are made. Information is available by writing to Director, Kent Program, The Danforth Foundation, 222 South Central Avenue, St. Louis, Missouri 63105.

Mathematics Research Center. For support of mathematical research of interest to the U. S. Army. Predoctoral fellowships for U.S.citizens for graduate study in any of the Departments of Mathematics, Computer Sciences, Statistics, or School of Business and College of Engineering, at the University of Wisconsin. For information write to J. Barkley Rosser, Director, Mathematics Research Center, United States Army, University of Wisconsin, Madison, Wisconsin 53706.

National Defense Student Loan Program. Fields unrestricted. Student must be carrying at least one half the normal full-time academic workload as determined by the institution where he is or will be enrolled. Funds are administered by participating institutions and applications should be made through the Director of Admissions or officer in charge of student financial aid. Other inquiries may be addressed to Division of Student Financial Aid, Office of Education, Department of Health, Education, and Welfare, Washington, D. C. 20202.

National Science Foundation Graduate Fellowships. Application may be made by college seniors and graduate students working in a degree program. All applicants must be citizens of the United States. Annual stipends are $\$ 2,400$ for the first-year level; $\$ 2,600$ for the intermediate level; and $\$ 2,800$ for the terminal-year level. Dependency allowances and allowances for tuition, fees, and limited travel will also be provided. Further information and application materials may be obtained from the Fellowship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington D. C. 20418. Applications are due in early December.

National Science Foundation Graduate Traineeships. For 9- or 12-month study programs leading to the master's or doctoral degree. Summer traineeships will also be available for graduate teaching assistants to enable them to continue their studies during the summer on a full-time basis. Trainees must be U. S. citizens or nationals. Trainees are selected by the institution at which graduate study is to be undertaken, and application must be made to the university. Further information and a list of participating institutions may be obtained from the Graduate Traineeship Program, Division of Graduate Education in Science, National Science Foundation, Washington, D. C. 20550.

North Atlantic Treaty Organization Fellowships. The Science Committee awards each year a number of Graduate Apprenticeships in Operational Research. The purpose of this scheme is to enable young scientists to receive practical training in operational research at one of a number of NATO or national centers. The normal assignment is for two years, subject to satisfactory completion of the first year. Applicants need not have previous experience in operational research, but they should have a scientific background with a sound basic training in mathematics. Each apprentice receives from NATO an allotment of $\$ 4,000$ per year plus travel expenses, together with the removal expenses for his personal belongings. An allowance of $\$ 200$ is also paid for each dependent accompanying the apprentice. Awards are also made to operational research scientists who wish to make a short "study visit" to a foreign country within the NATO Alliance, in order to learn about new techniques or procedures in operational research. Application forms for both of these awards can be obtained from the Scientific Affairs Division (Operational Research), NATO, Brussels, 39, Belgium.

Oak Ridge Graduate Fellowship Program. Opportunity for graduate students working toward doctoral degrees in scientific fields, including mathematics, to use AEC installations at Oak Ridge, Savannah River Laboratory, and Puerto Rico Nuclear Center for thesis research. U. S. citizenship is required. About 25 fellowships are awarded annually. Inquiries may be addressed to University Participation Office, Oak Ridge Associated Universities, Post Office Box 17, Oak Ridge, Tennessee 37830.

Population Council Fellowships in Demography. Citizenship unrestricted. Fields associated with
demography, statistics, economics, and sociology. Approximately 40 fellowships are awarded. Forms available from Fellowship Secretary, Population Council, 245 Park Avenue, New York, New York 10017.

RCA Fellowships. Grants are for graduate study in biomedical engineering, computer/information science, computer science, electrical engineering, electronics, and physics. (RCA-NBC Fellowships are available in journalism and telecommunications.) Candidates are selected by appropriate officials in designated universities. Although appointments are for one year, RCA Fellows are eligible for reappointment. For further information write to the RCA Educational Aid Committee, David Sarnoff Research Center, Princeton, New Jersey 08540.

Shell Companies Foundation, Incorporated, Shell Merit Residencies. 12-month residencies at Cornell and Stanford Universities; primarily for high school teachers of science and mathematics who have been Shell Merit Fellows. For information write to Coordinator, Shell Merit Programs, Room 19, Stone Hall, Cornell University, Ithaca, New York 14850, or to Dr. Paul DeHart Hurd, Coordinator, Shell Merit Programs, School of Education, Stanford University, Stanford, California.

Shell Merit Fellowships of Shell Companies Foundation, Inc. For U.S. citizens who are high school teachers of science and mathematics. Tenable at Cornell University during a 6 -week summer period. Write to Coordinator, Shell Merit Programs, Room 19, Stone Hall, Cornell University, Ithaca, New York 14850.

Shell Merit Graduate Scholarships at Cornell University. For graduates of a college or university as National Merit or National Achievement Scholars or finalists who wish to enter or advance their preparation for pre-college science or mathematics teaching. For information write to Coordinator, Shell Merit Programs, Room 19, Stone Hall, Cornell University, Ithaca, New York 14850.

Sigma Delta Epsilon Grant-in-Aid. This award, to be given annually by Sigma Delta Epsilon, Graduate Women's Scientific Fraternity, is available to any woman who holds a degree from a recognized institution of higher learning and has demonstrated outstanding ability and promise in research in one of the mathematical, physical, or biological sciences. The period of the grant shall not exceed one calendar year. The stipend may be applied either directly to the research project or to course work, provided the latter is relevant to the research program. Appointments will be made irrespective of race, nationality, creed, or marital status. Preference will be shown to applicants 35 years of age or older but this limitation is not absolute. Application forms may be obtained from Dr. Kathleen R. Stitt, Doster Hall, University of Alabama, University, Alabama 35486. Applications should be submitted before February l, 1970.

Smithsonian Institution Research Assistantships. For graduate and undergraduate students to work under the guidance of a Smithsonian staff member. Grants are made for a twelve-week period, during the summer. Deadline for receipt of applications is February 1, 1970. Further information and application forms may be obtained from the Division of Graduate Studies, Office of Academic Programs, Room 236, Pension Building, Smithsonian Institution, Washington, D. C. 20560.

Smithsonian Institution Visiting Research Associateships. For candidates for the Ph.D. or equivalent degree whose departments or universities approve their working at the Smithsonian. Deadline for applications is January 2, 1970. Further information and application forms may be obtained from the Division of Graduate Studies, Office of Academic Programs, Room 236, Pension Building, Smithsonian Institution, Washington, D. C. 20560.

United States Department of Health, Education and Welfare, National Defense Graduate Fellowship Program. Limited to specified universities. Applicant must have completed a bachelor's degree, intend to enroll in a full-time doctorate program, and signify an interest in a college teaching career. Fellowships are usually 3 -year awards. Application is made directly to the university at which the student intends to study. For general information write to the Graduate Academic Programs Branch, Division of Graduate Programs, Bureau of Higher Education, Office of Education, United States Department of Health, Education and Welfare, Washington, D. C. 20202.

United States Department of Health, Education, and Welfare; National Institutes of Health. Supports predoctoral, postdoctoral, and special fellows. Research in biostatistics, especially as related to health and disease. Applicant must have earned an appropriate degree and show that his goal is a research career in the health related sciences. U. S. citizenshị or lawful admittance to the U. S. for permanent residence is required. Announcements available from Fellowships Section, Career Development Review Branch, Division of Research Grants, National Institutes of Health, Bethesda, Maryland 20014.

United States Steel Corporation Fellowships. A bachelor's degree and U. S. citizenship are required. Applicant must usually be a candidate for a doctor's degree, but master's degree candidates may also be eligible. Thirty-three two-year awards are made through 33 participating colleges and universities for study in the natural and physical sciences, engineering, business administration, humanities, and social sciences. General information may be obtained from the United States Steel Corporation, Fellowship Program, Room 1805, 71 Broadway, New York, New York 10006.

United States Steel Foundation Fellowships. A bachelor's degree and U. S. citizenship are required. Applicant must usually be a candidate for a doctor's degree, but master's degree candidates may also be eligible. Forty-four two-year awards are made through 44 participating colleges and universities for study in the natural and physical sciences, engineering, business administration, humanities, and social sciences. General information may be obtained from the Executive Director, United States Steel Foundation, Inc., 71 Broadway, New York, New York 10006.

Woodrow Wilson National Fellowship Foundation. For U.S.and Canadian first-year graduate students interested in college teaching careers. Nominations from faculty members are due by October 20; no application will be accepted directly from students. For information write to Dr. Hans Rosenhaupt, President, Woodrow Wilson National Fellowship Foundation, Box 642, Princeton, New Jersey 08540.

Zonta International. Amelia Earhart Fellowships. For women holding a bachelor's degree in science and interested in graduate work in aero-space and related sciences. Recipients will be granted $\$ 3,000$, and past recipients may apply for renewed grants. Write to Zonta International, 59 East Van Buren Street, Chicago, Illinois 60605.

## II. Postdoctoral Awards

AFOSR-NRC Postdoctoral Research Program. Supported by the Air Force Office of Scientific Research and administered by the National Research Council. These awards, open only to citizens of the United States, are tenable at appropriate educational institutions and research laboratories in the United States and abroad, and provide to young investigators of superior ability, who are recent recipients of the doctoral degree, special opportunities for advanced study and fundamental research in various branches of the natural and applied sciences of particular importance to the Air Force. Application materials for the 1970-1971 program are available from the Fellowship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418.

Agency for International Development. Research grants for research projects and analytical studies in systems and operations dealing with socio-economic development problems. Research groups are encouraged to investigate problems of their own devising within the above areas. For further information write to Mr. Glenn B. McClelland, Research Coordination Staff, Office of Program and Policy Coordination, Agency for International Development, Department of State, Washington, D. C. 20523.

Agency for International Development, Vietnam. Researchgrants for research projects and analytical studies in systems and operations dealing with socio-economic development problems in Vietnam. Research groups are encouraged to investigate problems of their own devising within the above areas. For further information, write to Dr. Karl F. Bode, Director, Research, Evaluation and Information Retrieval Staff, Bureau for Vietnam, Agency for International Development, Department of State, Washington, D. C. 20523.

Air Force Office of Aerospace Research. Postdoctoral and Senior Postdoctoral Research Associateships. Awards made in several fields, including mathematics. Tenable at two laboratories in the United States. Applicants should state, in some detail, their field of specialization and should indicate laboratory of interest. Annual stipends for these appointments range from $\$ 12,500$ to $\$ 13,000$ for the recent recipient of the doctorate with an adjustment made for the senior candidate. More details regarding this program may be obtained from the Office of Scientific Personnel, Associateship Office, National Research Council, 2101 Constitution Avenue, N.W., Washington, D. C. 20418. Deadline for submission of applications is February 6, 1970.

Air Force Office of Scientific Research. Research Contracts and Grants. Research mathematicians are encouraged to submit proposals through their college, university, or industrial laboratory for research in mathematical fields in which they specialize. Proposals should be mailed to the Director of Mathematical Sciences, Air Force Office of Scientific Research, 1400 Wilson Boulevard, Arlington, Virginia 22209.

American Association of University Women Educational Foundation. Fifty research fellowships for American women, unrestricted as to age or field, except the awards are not made in the creative or performing arts, to be used abroad or in the United States. Applicants must hold a doctorate or its equivalent in scholarly achievement or have fulfilled all requirements for the doctorate, except the dissertation, by July 1 preceding the fellowship year. Preference given to dissertation year applicants. Deadline for application is December l. Write to Fellowships Office, AAUW Educational Foundation, 2401 Virginia Avenue, N.W., Washington, D. C. 20037.

American Philosophical Society. Postdoctoral research grants of small amounts according to need for candidates with Ph.D. or equivalent to aid specific research projects. Tenable abroad and in U. S. Awards made in October, December, February, April, and June. For information write to the American Philosophical Society, 104 South Fifth Street, Philadelphia, Pennsylvania 19106.

Argonne National Laboratory. Limited number of postdoctoral appointments and temporary appointments for faculty members in many fields of applied mathematics and the computer sciences. Write to James L. Weeks, Professional Placement Manager, Argonne National Laboratory, 9700 S. Cass Avenue, Argonne, Illinois 60439.

Atomic Energy Commission Division of Research. Supports research in applied mathematics, numerical analysis, digital computer design, programming research, and related topics at universities and other institutions. Submit proposals to the Division of Research, U. S. Atomic Energy Commission, Washington, D. C. 20545.

Atomic Energy Commission Postdoctoral Fellowships. Applicants must hold a Ph.D. degree and be interested in nuclear science. U.S.citizenship is required. Approximately 30 fellowships are awarded. Write to U. S. Atomic Energy Commission, Division of Nuclear Education and Training, University Relations Branch, Washington, D. C. 20545.

Courant Institute Instructorships in Mathematics are open to young mathematicians with doctor's degrees who show strong promise in research. The teaching duty will consist of one graduate course related to the field of interest of the instructor. Appointments are for two years. The academic salary for nine months will be $\$ 10,500$. In addition, the instructor may receive $2 / 9$ of this amount for research in residence during two summer months. Inquiries or requests for application forms should be addressed to the Committee on Instructorships, Courant Institute of Mathematical Sciences, 251 Mercer Street, New York, New York 10012. Applications should be filed no later than January l, 1970.

Courant Institute Postdoctoral Visiting Memberships. The Courant Institute of Mathematical Sciences of New York University offers postdoctoral Visiting Memberships to mathematicians, scientists, and engineers who are interested in its program of training and research in a broad range of pure and applied mathematics. Applications for the academic year 1970-71 must be submitted before January 1 , 1970. Inquiries should be addressed to the Visiting Membership Committee of the Courant Institute, 251 Mercer Street, New York, New York 10012.

Educational Testing Service. Two renewable research fellowships in psychometrics at Princeton University. Apply September, to Director, Psychometric Fellowship Program, Educational Testing Service, Princeton, New Jersey 08540.
G. C. Evans Instructorships at Rice University. For promising young mathematicians with the doctorate, primarily for new Ph.D.'s. Appointments are for two years at a salary of at least $\$ 10,000$ for the regular academic year. Teaching duties will amount to six hours per week in one semester and three hours per week in the other, or the equivalent. Inquiries and applications should be addressed to Professor Salomon Bochner, Chairman, Department of Mathematics, Rice University, Houston, Texas 77001.
J. Willard Gibbs Instructorships in Mathematics. Offered by Yale University to promising young mathematicians with the doctorate, primarily recent Ph.D.'s. Appointments are for two years at a salary of $\$ 10,300$ for the regular academic year. In the past, summer support for two months has been obtained from a grant from the Air Force Office of Scientific Research; it is expected that this practice will be continued in the future. Teaching duties will involve six hours per week in one semester and three hours per week in the other, or the equivalent. These will include one semester course at the graduate level in the general area of the instructor's research. Inquiries and applications should be addressed to the Chairman, Department of Mathematics, Yale University, Box 2155 , Yale Station, New Haven, Connecticut 06520. Preference will be given to applications received before January 17, 1970.

John Simon Guggenheim Memorial Foundation Fellowships. Applicants should be between 30 and 45 years of age (exceptions are made) and engaged in scientific research. No academic degree is required, but the fellowships are on the advanced postdoctoral level. U. S. citizenship or permanent residence is required. Fellowships are also offered to citizens or permanent residents of all countries and territories of the Western Hemisphere and of the Philippines, to assist studies to be carried on in the United States. Nominations are made by the Committee of Selection. Approximately 350 awards are made, averaging (in 1969) $\$ 8,200$. For more information write to President, John Simon Guggenheim Memorial Foundation, 90 Park Avenue, New York, New York 10016.

Václav Hlavatý Research Assistant Protessorships in Mathematics. Offered by the Department of Mathematics at Indiana University to young mathematicians with doctorates who show definite promise in research. The appointment is for three years with an academic-year salary of at least $\$ 11,000$. The teaching duties during the first academic year will involve three hours per week and during the next two academic years will involve sixhours per week. The Air Force Office of Scientific Research will support summer research for the recipients of the Václav Hlavaty Research Assistant Professorship. This will provide $2 / 9$ of the academic-year salary for the two summer months. There will also be an annual amount of $\$ 400$ available for professional expenses, such as travel to meetings, supplies, publication costs, etc. Inquiries or request for application forms should be addressed to Professor George Springer, Chairman, Department of Mathematics, Swain Hall East, Indiana University, Bloomington, Indiana 47401. Preference will be given to applications received before January 31, 1970.

Institute for Advanced Study Membership. The School of Mathematics will grant a limited number of memberships, some with financial support, for research in mathematics at the Institute during the academic year 1970-1971. Candidates must have given evidence of ability in research comparable at least with that expected for the Ph.D. degree. Application blanks may be obtained from the Secretary of the School of Mathematics and should be returned (whether or not funds are expected from some other source) by January 15, 1970, or as soon thereafter as possible.

Los Alamos Scientific Laboratory. Offered to U.S.citizens holding Ph.D., with research opportunities in computer science, numerical science, and applied mathematics. A limited number of postdoctoral appointments are available for one year, subject to renewal for a second year. Write to Recruiting Department, Los Alamos Scientific Laboratory, University of California, P. O. Box 1663, Los Alamos, New Mexico 87544.

Mathematics Research Center. For support of mathematical research of interest to the U. S. Army. Visiting research member appointments at all levels from postdoctoral up. For information write to J. Barkley Rosser, Director, Mathematics Research Center, United States Army, University of Wisconsin, Madison, Wisconsin 53706.

Michigan State University Postdoctoral Fellowships. As part of a university development program under a grant from the National Science Foundation, the Department of Mathematics at Michigan State University has established five postdoctoral research fellowships. These are to be awarded each year to promising young Ph.D.'s. The teaching duties of a postdoctoral research fellow consist of one course each term which may be an advanced graduate course or seminar. The stipend for 1970-1971 will be $\$ 10,500$ for an academic-year appointment. Research fellows are eligible for reappointment as a fellow for a second year or for appointment to a regular staff position. Additional information and application forms may be obtained from the Department of Mathematics, Michigan State University, Wells Hall, East Lansing, Michigan 48823. Completed applications should be filed by February 14, 1970.
C. L. E. Moore Instructorships in Mathematics. Offered by the Department of Mathematics at the Massachusetts Institute of Technology, open to young mathematicians with doctorates who show definite promise in research. The base salary will be $\$ 10,600$ and the teaching load is six hours per week in one semester and three hours per week in the other. The salary can be supplemented by summer work on a research grant, sponsored by the Air Foroe Office of Scientific Research, or by teaching in the summer session. The appointments are annual but renewable for one additional year. Applications should be filed not later than January 5 on forms obtained from the Department, 2-247, Massachusetts Institute of Technology, Cambridge, Massachusetts.

National Aeronautics and Space Administration. Postdoctoral and Senior Postdoctoral Resident Research Associateships. Open to individuals at the postdoctoral level who have the Ph.D., M. D., or Sc. D. degree or its training equivalent, or who have completed the requirements for one of these degrees. Citizenship is unrestricted, but a foreign national must have full command of the English language. Approximately 150 awards are made in numerous fields, including mathematics. Tenable at

Ames Research Center, Moffett Field, California; Electronic Research Center, Cambridge, Massachusetts; Goddard Space Flight Center, Greenbelt, Maryland; Institute for Space Studies, New York City; Jet Propulsion Laboratory, Pasadena, California; Langley Research Center, Hampton, Virginia; Manned Spacecraft Center, Houston, Texas; and Marshall Space Flight Center, Huntsville, Alabama. Forms are available from the Associateship Office, Office of Scientific Personnel, Room JH 606, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Annual stipend begins at $\$ 13,000$. Senior stipend variable. Deadlines for receipt of completed applications in 1970 are February 6, May 15, August 15, and October 31, with announcement of awards in April, July, October, and December.

National Aeronautics and Space Administration, Research Grants. Through grants and contracts to educational and nonprofit institutions and industries, NASA sponsors research in fundamental and applied mathematics related to space science and engineering problems. Unsolicited proposals should be submitted to the Office of University Affairs, National Aeronautics and Space Administration, Washington, D. C. 20546.

National Bureau of Standards. The Office of Scientific Personnel of the National Research Council announces the availability of Postdoctoral Research Associateship appointments for 1970-1971. Awards are made in several fields, including mathematics. Tenable in the Washington, D. C. area and Boulder, Colorado. Applicants should state, in some detail, their field of specialization and should indicate laboratory of interest. Annual stipend for these appointments is $\$ 13,389$ for the recent recipient of the doctorate. More details regarding this program may be obtained from the Office of Scientific Pęrsonnel, Associateship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Deadline for submission of applications is February 6, 1970.

National Research Council. In association with certain Federal laboratories, the Office of Scientific Personnel of the NRC evaluates applications and makes appointments for associateships at the following laboratories: National Bureau of Standards (Washington, D. C. area and Boulder, Colorado); Naval Undersea Research and Development Center (San Diego, California); Air Force Office of Aerospace Research (two laboratories); National Aeronautics and Space Administration (eight laboratories); Naval Research Laboratory (Washington, D. C.); U. S. Army Munitions Command (Feltman Laboratories, Dover, N. J., and other locations); U. S. Army Natick Laboratories (Natick, Massachusetts); Air Force Office of Scientific Research (at appropriate educational institutions and research laboratories in the U. S. and abroad). Detailed information regarding these programs may be obtained from the Office of Scientific Personnel, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Applicants should state, in some detail, their field of specialization and should indicate laboratory of interest.

National Science Foundation Postdoctoral Fellowships. For U.S.citizens or nationals who have earned or who will have earned a doctoral degree as of the beginning of their fellowships, who wish to enter upon or continue postdoctoral study. Application materials may be obtained from the Fellowship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Applications due in early December.

National Science Foundation Research Grants. Proposals accepted at any time. Instructions for the preparation of proposals, contained in a booklet entitled "Grants for Scientific Research," may be obtained upon request from the Mathematical Sciences Section, National Science Foundation, Washington, D. C. 20550.

National Science Foundation Residencies in Computing and Computer Activities. The NSF will award up to ten one-year faculty residencies at Systems Development Corporation, Santa Monica, California, for training in computing and computer applications. Participants will spend from July l, 1970, to June 30, 1971, in a program developed by SDC. Proposals for participation should be submitted by the institution of the proposed participant, and preference will be given to those institutions granting 100 or more baccalaureates in science in any three-year period since 1963. Since the objective of the program is to increase the number of institutions with strong academic computing activities, institutions already recognized as being outstanding in computing are not encouraged to apply. For additional information, write to the Education, Research and Training Section, Office of Computing Activities, National Science Foundation, Washington, D. C. 20550.

National Science Foundation Science Faculty Fellowships. Requirements are a bachelor's degree or its equivalent, three or more academic years' teaching experience at the collegiate level with the rank of instructor or higher, and the intention to continue teaching. Applicants must also be U.S. citizens or nationals. Approximately 200 awards are available. Forms may be obtained by writing to
the Division of Graduate Education in Science, National Science Foundation, Washington, D. C. 20550. Applications due in early October.

National Science Foundation Senior Postdoctoral Fellowships. Candidates must have held a doctoral degree in one of the basic fields of science, mathematics, or engineering for at least five years (or have had equivalent scientific training and experience), and have achieved recognized stature in their profession. Applicants must be U. S. citizens or nationals. Approximately 50 awards are made. Information and application materials will be available in the late summer from the Division of Graduate Education in Science, National Science Foundation, Washington, D. C. 20550. Applications due early in October.

Naval Ordnance Laboratory. The Office of Scientific Personnel of the National Research Council announces the availability of Postdoctoral Research Associateship appointments for 1970-1971. Awards are made in several fields, including mathematics. Tenable in Silver Spring, Maryland. Applicants should state, in some detail, their field of specialization. Annual stipend for these appointments is $\$ 13,389$ for the recent recipient of the doctorate. More details regarding this program may be obtained from the Office of Scientific Personnel, Associateship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Deadline for submission of applications is February 6, 1970.

Naval Undersea Research and Development Center. The Office of Scientific Personnel of the National Research Council announces the availability of Postdoctoral Research Associateship appointments for 1970-1971. Awards are made in several fields including mathematics. Tenable in San Diego, California. Applicants should state in some detail their field of specialization. Annual stipend for these appointments is $\$ 13,389$ for the recent recipient of the doctorate. More details regarding this program may be obtained from the Office of Scientific Personnel, Associateship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Deadline for submission of applications is February 6, 1970.

Benjamin Peirce Lectureships at Harvard University, now carrying the rank of Assistant Professorships. The appointments are for three years with a starting salary of $\$ 9,000$ (for the nine-month academic year) and annual increments of $\$ 500$. This salary can be augmented during the summer by teaching at the Summer School or by work on a research contract if funds are available. The teaching committment is six hours a week, including a graduate course on a subject of the lecturer's choice, if desired. Application forms may be obtained by writing to the Department of Mathematics, Harvard University, 2 Divinity Avenue, Cambridge, Massachusetts 02138, and should be filed by February 1, 1970.

Alfred P. Sloan Foundation. Unrestricted grants made to selected young university scientists who are regular faculty members for support of basic research in the physical sciences, including mathematics. Candidates do not apply but are nominated by their department chairmen or other scientists. For information write to the Alfred P. Sloan Foundation, 630 Fifth Avenue, New York, New York 10020.
J. D. Tamarkin Instructorships. These instructorships at Brown University are intended to give promising young mathematicians the opportunity to begin their careers in an active and stimulating mathematical environment where ample opportunity exists for association with senior staff members. Teaching load is six hours one semester and three the other. Salary for the academic year is $\$ 10,000$ with opportunity for summer support. Applicant should have his doctorate by the time his appointment is to begin. Three letters of recommendation and a letter from applicant expressing interest in an instructorship must be submitted by January 15, 1970. For further information write to Chairman, Department of Mathematics, Brown University, Providence, R. I. 02912.

University of New Mexico. Postdoctoral fellowships which are provided under the terms of a National Science Foundation Departmental Grant for recent recipients of the doctorate or from persons expecting to receive the doctorate in 1970. Awards, which are for the period September 1970 to June 1971, provide a stipend of $\$ 11,000$. No formal duties are imposed, but recipients of the awards are expected to engage actively in research and to maintain a close association with faculty members having related mathematical interests. Inquiries should be addressed to the Chairman, Department of Mathematics and Statistics, University of New Mexico, Albuquerque, New Mexico 87106.
U. S. Army Munitions Command. Postdoctoral and Senior Postdoctoral Resident Research Associateships. Awards made in several fields, including mathematics. Tenable at Feltman Laboratories, Dover, New Jersey, and other locations. Applicants should state, in some detail, their field of specialization and should indicate laboratory of interest. Annual stipends for these appointments range from $\$ 12,500$ to $\$ 13,000$ for the recent recipient of the doctorate with an adjustment made for the senior
candidate. More details regarding this program may be obtained from the Office of Scientific Personnel, Associateship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Deadline for submission of applications is February 6, 1970.
U. S. Army Natick Laboratories. Postdoctoral and Senior Postdoctoral Visiting Scientists Research Associateships. Awards made in several fields, including mathematics. Tenable in Natick, Massachusetts. Applicants should state, in some detail, their field of specialization and should indicate laboratory of interest. Annual stipends for these appointments begin at $\$ 12,500$. Senior stipend variable. More details regarding this program may be obtained from the Associateship Office, JH606, Office of Scientific Personnel, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Deadlines for submission of applications in 1970 are February 6, May 15, August 15, and October 31 with announcement of awards in April, July, October, and December.
U. S. Army Research Office--Durham. Research grants and contracts for basic research in mathematics, engineering, and physical and environmental sciences. Write to Commanding Officer, U.S. Army Research Office--Durham, Box CM, Duke Station, Durham, North Carolina 27706.

John Wesley Young Research Instructorships. Two instructorships are awarded by Dartmouth College each year. Teaching duties average six hours per week and are of a varied and nonroutine nature. The academic-year stipend may be supplemented by a summer research fellowship. The appointments are for two years and are not renewable. Applicants should write to Donald L. Kreider, Chairman, Mathematics Department, Dartmouth College, Hanover, New Hampshire 03755.

## III. Study Abroad

Alexander von Humboldt Foundation Fellowships. These fellowships of 6 to 12 months are offered in order to pursue advanced academic research projects at a German university or research institute. Fields of research and citizenship are unrestricted. Amount of stipend: 'forschungsstipendium' DM 1200.-monthly, 'Dozentenstipendium' DM 1600.-monthly; supplementary family allowances, travel expenses. An extension of the original award period is possible. Applicants should furnish proof of independent teaching experience at university level or research work (of at least two years if interested in a 'Forschungsstipendium' and at least five years if interested in a 'Dozentenstipendium'). They should hold a Ph.D., have sufficient knowledge of German, and as a rule, not be older than 38. Applicants for a 'Dozentenstipendium' should have outstanding academic publications to their credit. For further information write to Alexander von Humboldt-Stiftung, 532 Bad Godesberg, Schillerstrasse 12, Germany.

Alliance Française Scholarships. For Americans between 20 and 30 years old with a working knowledge of French to study in France at the graduate level. Fields unrestricted. Write to Chairman of Scholarship Committee, Alliance Française de New York, Inc., 527 Madison Avenue, New York, New York 10022, or Alliance Française, 101 Boulevard Raspail, Paris 6, France.

American Association of University Women Educational Foundation. See Section II.
American Philosophical Society. See Section II.
American-Scandinavian Foundation. Graduate fellowships to be used in Scandinavia. Applicants must be U. S. citizens who have completed their college education and should be under 40 years old. Application deadline is December 1, 1969 (November l for Marshall Fellowships for Denmark). Write to The American-Scandinavian Foundation, 127 East 73 Street, New York, New York 10021.

Foreign Area Fellowship Program. This program offers a limited number of research training and internship opportunities in Latin America, Asia, Africa, Western and Eastern Europe, and the Near East, the majority of which are in the social sciences and humanities. A few grants are available for those in the natural and physical sciences. Applicants must be, in most cases, predoctoral students enrolled in American or Canadian universities. Further information may be obtained by writing to Foreign Area Fellowship Program, 110 East 59th Street, New York, New York 10022.

Fulbright-Hays Grants. For graduate study or research in any field in which the project can be profitably undertaken abroad. Applicant must be U. S. citizen and have language proficiency sufficient to carry out the proposed study and to communicate with the people of the host country. Students already enrolled in a U. S. university must apply directly to the Fulbright Program Advisor on his campus. Unenrolled students may apply to the Institute of International Education. Further details may
be obtained from the Information and Reference Services Division, Institute of International Education, 809 United Nations Plaza, New York, New York 10017.

Fulbright-Hays Postdoctoral Awards. United States Government grants available annually in all fields for university lecturing and postdoctoral research abroad. Elligibility requirements include U. S. citizenship; for lecturing, college teaching experience; for research, a doctoral degree or recognized professional standing at the time of application. In certain cases a knowledge of the language of the host country is required. Grants are generally tenable for one academic year in one designated country and include round-trip transportation for the grantee, maintenance allowance to cover living expenses of grantee and family, and a smallincidental allowance to cover supplies and services essential to the project. Subject to the availability of funds, a supplemental dollar grant for lecturers in most non-European countries may be given. Write to Committee on International Exchange of Persons, Senior Fulbright-Hays Program, 2101 Constitution Avenue, N. W., Washington, D. C. 20418.

Institute of International Education. Grants for graduate study abroad; includes U. S. Government grants and fellowships offered by other governments, foundations, universities, organizations and private donors. Applicant must be U. S. citizen, have a Bachelor's degree or its equivalent before the beginning date of the grant, generally be under 35 years of age, and be able to read, write, and speak the language of the host country by time of application. Students already enrolled at U. S. universities must apply through the Fulbright Program Advisor at his university. Unenrolled students may apply through the Institute of International Education. IIE regional offices are (1) 65 E . South Water Street, Chicago, Illinois 60601; (2) Capitol Life Center, E. 16th Avenue at Grant Street, Denver, Colorado 80203; (3) Suite 1411, Peachtree Center, 230 Peachtree Street, N. W., Atlanta, Georgia 30303; (4) Suite 1-A, World Trade Center, 1520 Texas Avenue, Houston, Texas 77002; (5) 1212 Wilshire Boulevard, Los Angeles, California 90017; (6) 1530 P Street, N. W., Washington, D. C. 20005; (7) 291 Geary Street, San Francisco, California 94102; (8) 809 United Nations Plaza, New York, New York 10017 (Main Office).

International Research and Exchanges Board. IREX administers academic exchange programs between scholars in the United States and the countries of East-Central and Southeast Europe and the Soviet Union. These programs operate under reciprocal agreements with the countries concerned. U. S. citizenship is required for all programs, except short-term grants to citizens of the exchange countries for visits to the United States. Applicants to the exchange programs must have a full-time affiliation with a North American college or university and be faculty members or advanced doctoral candidates who will have completed all requirements for the Ph.D. except the thesis by the time of participation. Applicants will be expected to have mastery of the language of the host country sufficient for the purposes of their research and study. IREX provides domestic and international transportation and an internal travel allowance for the participant; one-half of domestic and international transportation costs for accompanying family members for stays of at least one semester, or full family transportation costs for stays of an academic year; for married graduate students a family allowance determined by the number of dependents; for salaried participants a stipend in lieu of salary less the value of housing and other benefits received from the host country. Stipends are adjusted to take into account such other resources as fellowships and sabbatical salaries. For further information, write to International Research and Exchanges Board, 110 East Fifty-Ninth Street, New York, New York 10022.

Marshall Scholarships. Offered by the British Government to U. S. Graduates; tenable at any university in the United Kingdom. Recipients of awards are required to take a degree at their British university. Fields unrestricted. Apply through British Consulates-General in the following regions: (1) Northeast: Room 2303, John Hancock Building, Boston, Massachusetts 02116; (2) East: 845 Third Avenue, New York, New York 10022; (3) South: 814 Atlanta Merchandise Mart, 240 Peachtree Street, N. W., Atlanta, Georgia 30303; (4) Midwest: 33 North Dearborn Street, Chicago, Illinois 60602; (5) Pacific: 5th Floor, Hong Kong Building, 160 Sansome Street, San Francisco, California 94104.

Netherland-America Foundation Graduate Study Grants. Small supplementary grants toward study in the Netherlands. Apply to the Netherland-America Foundation, Inc., 10 Rockefeller Plaza, New York, New York 10020.

North Atlantic Treaty Organization Postdoctoral Fellowships. For study abroad in countries in the NATO Alliance. Open to U.S. citizens who have earned a doctoral degree or who have had research training and experience equivalent to that represented by the doctoral degree in one of numerous scientific fields, including mathematics. Tenure is normally either 9 or 12 months. Write to the Fellowship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418.

North Atlantic Treaty Organization Senior Fellowships in Sciences. For U. S. citizens or nationals to study new scientific techniques and developments at nonprofit research and educational institutions in other NATO nations, or countries cooperating with NATO, for tenures of one to three months. Senior staff members may be nominated by any U.S. educational institution that offers a postbaccalaureate degree in one of the sciences, or any nonprofit scientific research institution. Approximately 20 awards are made. Evaluations are made periodically. For application materials, write Division of Graduate Education in Science, National Science Foundation, Washington, D. C. 20550.

Organization of American States Fellowship. Applicants must be citizens or permanent residents of member states of the OAS. Graduate study must be done in member state other than the country of the applicant. Fields are individually limited by member countries. Forms are available from the Technical Secretariat of the OAS Fellowship Program, Division of Fellowships, Department of Technical Cooperation, Pan American Union, Washington, D. C. 20006.

Rotary Foundation Graduate Fellowships and Undergraduate Scholarships. One academic year of study abroad is available to outstanding young men and women who are interested in world affairs and who can fulfill a dual role of scholar and "ambassador of good will." Graduate Fellowships and Undergraduate Scholarships cover full transportation, education, living, and miscellaneous expenses for one academic year, plus, in certain cases, a period of intensive language training in the study country prior to the commencement of the regular academic year. Awards are made for study in any field and are tenable in more than 140 countries in which there are Rotary Clubs. An applicant for both types of awards must be unmarried. An applicant for a Graduate Fellowship must be between the ages of 20 and 28 inclusive as of July 1971, and have obtained a bachelor's degree or equivalent prior to the beginning of his fellowship year. An applicant for an Undergraduate Scholarship must be between the ages of 18 and 24 inclusive as of July 1971, and have completed two years of university level work but not have obtained a bachelor's degree prior to the beginning of his scholarship year. Application must be made through the Rotary Club nearest to the applicant's permanent residence not later than March 15, 1970.

Royal Norwegian Council for Scientific and Industrial Research Postdoctorate Fellowships. Fields: engineering and applied sciences. Candidates should not be more than 35 years of age. Studies can be carried out at the Universities of Oslo and Bergen, the Technical University of Norway, and at different institutes for applied research in Oslo, Bergen, and Trondheim. English may be used at all institutes; German and French at some institutes. Deadline each year is February l. Write to Royal Norwegian Council for Scientific and Industrial Research, Gaustadelleen 30, Oslo, Norway.

William and Mildred Zelosky Scholarships. Open to American and Polish men at least 21 years of age. American candidates must have at least a master's degree and a knowledge of the Polish language. Polish candidates must have at least their master's degree and preferably their doctorate, plus sufficient knowledge of the English language. Polish citizenship is required for study in the United States; U. S. citizenship is required for study in Poland. Write to Kosciuszko Foundation, 15 East 65th Street, New York, New York 10021.

## IV. Fellowships for Citizens of other Countries

Alliance Française Scholarships. Available to French citizens between 20 and 30 years old who have a working knowledge of English, for study in the U.S.A. at the graduate level. Fields unrestricted. Write to Chairman of Scholarship Committee, Alliance Française de New York, 527 Madison Avenue, New York, New York 10022 or Alliance Française, 101 Boulevard Raspail, Paris 6e, France.

American Association of University Women International Fellowships. Approximately 50 awards made to women of other countries for advanced study or research in the United States. No restriction as to age or field of study, except that awards are not made in the creative or performing arts. An applicant must hold a bachelor's degree, be proficient in English, and intend, to return to her own country. Forms are to be obtained in the applicant's country from the Fellowships Office, AAUW Educational Foundation, 2401 Virginia Avenue, N. W., Washington, D. C. 20037 or the Cultural Affairs Officer of the U. S. Embassy.

Fulbright-Hays Program. Grants under the Fulbright-Hays Act for study, research, teaching, and lecturing in the United States are available to nationals of many countries. Information regarding these opportunities may be secured from the Cultural Affairs Officer of the United States Embassy or from the binational Educational Commission or Foundation if there is one in the inquirer's own country. The number of grants for the academic year 1970-1971 will depend on funds available.

Institute of International Education. Open to nationals of most countries. Levels: undergraduate and graduate. Fields unrestricted. Develops and administers exchange programs for a number of organizations and corporations and administers U.S. Government grants under the Fulbright-Hays Act for students under the educational exchange program of the Department of State. Write to the Selection Committee in the candidate's own country; address may be obtained from the United States Embassy or Consulate. IIE overseas regional offices: Post Office Box 5869, Nairobi, Kenya; Apartado 300, Lima, Peru; Reid Hall, 4 Rue de Chevreuse, Paris 6, France; P. O. Box 6907, Tsimshatsui, Hong Kong.

Kappa Kappa Gamma Fraternity Fellowships. For Canadian citizens. See Section I.
National Aeronautics and Space Administration. International University Fellowships in Space Science. Foreign nationals only. Level: graduate and postdoctoral. Candidates must be sponsored by their national or regional space research organization or national research councils; must have the equivalent of an earned Master of Science or Master of Engineering degree and must intend to return to their own countries. Fields: all space sciences. Fellowships in the mathematical sciences tenable at 33 U . S. universities. Applications should be made to the national space research organization, National Research Council, or appropriate organization of the applicant's own country. Further information may be obtained from the Office of Scientific Personnel, National Research Council, 2101 Constitution Avenue, Washington, D. C. 20418.

National Aeronautics and Space Administration. See Section II.
National Science Foundation Senior Foreign Scientist Fellowships. For foreign nationals who have had a doctoral degree in science for at least five years or comparable research or teaching experience over a 10 -year period. Must be citizens of a nation which maintains diplomatic relations with the $U$. $S$. Approximately 50 awards are made. Applicants must be recommended by a U. S. educational institution participating in the program. Further information and a list of participating institutions may be obtained from Division of Graduate Education in Science, National Science Foundation, Washington, D.C. 20550. Application is made directly to the institution.

North Atlantic Treaty Organization Fellowships. See Section I.
Organization of American States Fellowships. Citizenship in member country of OAS is required. See Section III.

Population Council Fellowships in Demography. See Section I.
Shell Merit Fellowships of Shell Companies Foundation, Inc., and Shell Canada, Ltd. For Canadian citizens. See Section I.

Woodrow Wilson National Fellowship Foundation. For Canadian citizens. See Section I.
William and Mildred Zelosky Scholarships. Open to Polish men. See Section III.

## V. Other Sources of Information

S. Norman Feingold Scholarships, Fellowships and Loans. Volumes III and IV, Bellman Publishing Company, Box 172, Cambridge, Massachusetts 02138 , 1955, 1962. Listing of financial aid sources, plus an excellent bibliography especially in Volume III, listing other sources of similar information.

Fellowship and Research Opportunities in Mathematical Sciences, 1969-1970. Division of Mathematical Sciences, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Lists fellowships and grants available from various U. S. Government agencies and bureaus.

Fellowships Offered by Foreign Governments, Universities, and Private Donors. Institute of International Education, 809 United Nations Plaza, New York, New York 10017. List of fellowships and scholarships administered by the IIE for U. S. students.

Scholarships, Fellowships and Loans News Service. The Staff, Bellman Publishing Company, Box 172, Cambridge, Massachusetts 02138, published quarterly, \$20 per year. Up-to-date information regarding student financial aid. Annotated bibliography of books and professional journals.

National Defense Graduate Fellowships, Graduate Programs 1969-1970. U. S. Department of Health, Education, and Welfare, Office of Education, Washington, D. C. 20202. Gives pertinent information on how to apply for a fellowship and lists the participating institutions.

Selected List of Major Fellowship Opportunities and Aids to Advanced Education for Foreign Nationals. Fellowship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418, 1969. Contains a list of financial aid sources plus a bibliography listing other sources of financial aid information.

Selected List of Major Fellowship Opportunities_and Aids to Advanced Education for United States Citizens. Fellowship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418, 1969. Contains a list of fellowships available on the undergraduate, graduate, and postdoctoral levels plus a bibliography giving other sources of information on fellowships, scholarships, and loans.


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