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Muge Kanuni* (kanuni@math.uconn.edu), University of Connecticut, Department of Mathematics, 196 Auditorium Rd. U-3009, Storrs, CT 06269. *Dense Ideals of Incidence Algebras*. Preliminary report.

Let $I(X, R)$ be an incidence algebra where X is a locally finite partially ordered set and R is a commutative ring with identity. Recall that a left (right) ideal D of a ring T is left (right) dense, if the right (left) annihilator of the ideal $(D : t)$ is zero, for all t in T . In some cases, we construct a basis of ideals for the Gabriel topology on the dense ideals. Further, in this report, known results about essential ideals of an incidence algebra are used to obtain the necessary and sufficient conditions for $I(X, R)$ to have a minimal dense ideal. (Received September 25, 2000)