Submit your report by the 24th of May 2008.

Title for paper: Modeling the Indoor Radio channel for In-Building Cells: Specification and Design for a Computational Model.

Additional material: see attached Annex for diagrams

Length of paper: 4 pages including diagrams, tables, flow-charts and references.

Description: A computational model is required to predict the field strength map when designing indoor radio communication systems, like WiFi or for the development of autonomic mobile radio communication systems. Various approaches are reported in literature, for example (i) ray tracing models, (ii) empirical models or (iii) statistical models. In this short paper you will choose one of these techniques and describe the algorithms and functions required for the development of a computational indoor radio propagation model.
CCE3102- Assignment

Modelling Radio Channel in indoor cells.

Specifications & Design for computer model $\rightarrow$ software.

Ray tracing

Floor Plan - 2D
Elevation Line AA1

location of Tx & Pt
location of point of interest

Radio channel model

Impulse response
field strength

Structural specifications & furniture & fittings
Write an essay, including diagrams, tables, flowchart, etc. to describe the algorithms and functions required during the development of this computational model.

Total no of pages = 4

Including words, pictures, diagrams, tables, reference, and your name and ID card.

20% → 4 Ects → 100hrs

→ 20hrs

2-3hrs per page

2-3cm