The Databases course is intended to encourage the ability for abstract modelling of information, and to define the relationship between different elements and data identified in such information. The course is also intended to enable students to adapt a data model to the requirements of a database management system and understand in the process the different levels of viewing information and their impact on their integrity, availability and confidentiality within the system.
Students must have demonstrated knowledge and understanding in an area of study that is founded on general secondary education. Moreover, the area of study is typically at a level that includes certain aspects implying knowledge at the forefront of its field of study, albeit supported by advanced textbooks.

Students must be able to apply their knowledge to their work or vocation in a professional manner and possess skills that can typically be demonstrated by coming up with and sustaining arguments and solving problems within their field of study.

Students must have the ability to gather and interpret relevant data (usually within their field of study) in order to make judgments that include reflections on pertinent social, scientific or ethical issues.

Students must be able to convey information, ideas, problems and solutions to both an expert and non-expert audience.

Students must have developed the learning skills needed to undertake further study with a high degree of independence.

General Skills

An ability to conceive and develop computer systems or architectures that are centralised or distributed, integrating hardware, software and networks.

Knowledge of the basic materials and technologies, giving rise to learning and the developing of new methods and technologies, and which also provide huge versatility to adapt to new contexts.

Specific skills

An ability to understand and use the basic concepts of discrete mathematics, logics, algorithms and computational complexity, and their application for solving engineering-specific problems.

Basic knowledge of the use and programming of computers, operating systems, databases and computer programmes with applications for engineering.

DISTRIBUTION OF WORK TIME

<table>
<thead>
<tr>
<th>CLASSROOM-BASED ACTIVITY</th>
<th>INDEPENDENT STUDY/OUT-OF-CLASSROOM ACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>68 hours</td>
<td>82 hours</td>
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