

# University of Pretoria Yearbook 2021

## Software engineering 301 (COS 301)

**Qualification** Undergraduate

**Faculty** [Faculty of Engineering, Built Environment and Information Technology](#)

**Module credits** 27.00

**NQF Level** 07

**Programmes** [BIS Multimedia](#)

[BSc Computer Science](#)

[BSc Information and Knowledge Systems](#)

**Prerequisites** COS 212 and COS 214

**Contact time** 1 practical per week, 2 lectures per week

**Language of tuition** Module is presented in English

**Department** Computer Science

**Period of presentation** Year

### Module content

The module exposes students to problems associated with software development on an industrial scale. Overall goals of the module are: to become familiar with the latest trends in software engineering; to understand the software engineering process and to appreciate its complexity; to be exposed to a variety of methodologies for tackling different stages of the software lifecycle; to understand and apply the concepts of systems administration and maintenance; to complete the development of a fairly large object orientation-based software product. The focus of the module is on a project that lasts the whole year. The project is completed in groups of approximately four (4) students and teaches students to take responsibility for a variety of roles within a group, and to understand the different requirements for these; to experience the advantages and problems of working in a group; professionalism with regards to particularly colleagues and clients.

After the successful completion of this module, the student will be able to: understand the psychology of a client; work in groups; and have an appreciation for planning, designing, implementing and maintaining large projects. These qualities should place the students in a position in which they are able to handle software development in the corporate environment.

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