

# University of Pretoria Yearbook 2019

## Software engineering 301 (COS 301)

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| <b>Qualification</b>          | Undergraduate  |
| <b>Faculty</b>                | <a href="#">Faculty of Engineering, Built Environment and Information Technology</a>   |
| <b>Module credits</b>         | 27.00  |
| <b>Programmes</b>             | <a href="#">BIS Multimedia</a><br><a href="#">BIT</a><br><a href="#">BSc Computer Science</a><br><a href="#">BSc Information and Knowledge Systems</a> |
| <b>Prerequisites</b>          | COS 212 and COS 214  |
| <b>Contact time</b>           | 1 practical per week, 2 lectures per week  |
| <b>Language of tuition</b>    | Module is presented in English   |
| <b>Department</b>             | Computer Science   |
| <b>Period of presentation</b> | 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.

The information published here is subject to change and may be amended after the publication of this information. The [General Regulations \(G Regulations\)](#) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the [General Rules](#) section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.