



University of Pretoria Yearbook 2019

Computer security and ethics 330 (COS 330)

Qualification Undergraduate

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

Module content This module develops an appreciation of the fundamentals and design principles for information assurance and security. Students will develop a clear understanding of the basic information security services and mechanisms, enabling them to design and evaluate the integration of solutions into the user application environment. Emphasis will be placed on services such as authorisation and confidentiality. Students will acquire knowledge and skills of Security Models such as the Bell-LaPadula, Harrison-Ruzzo Ullman and Chinese Wall Model. Students will develop a detailed understanding of the confidentiality service by focusing on cryptology and the practical implementation thereof. The student will be introduced to professional and philosophical ethics. At the end of the module students will be able to engage in a debate regarding the impact (local and global) of computers on individuals, organisations and society. The professionalism of IT staff will be discussed against national and international codes of practices such as those of the CSSA, ACM and IEEE.

Module credits 18.00

Programmes [BIS Multimedia](#)

[BIT](#)

[BSc Computer Science](#)

[BSc Information and Knowledge Systems](#)

[BSc Physics](#)

Prerequisites COS 110

Contact time 2 lectures per week, 1 practical per week

Language of tuition Module is presented in English

Department Computer Science

Period of presentation Semester 2

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