



University of Pretoria Yearbook 2018

Chemical engineering practice 420 (CPR 420)

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| Qualification | Undergraduate |
| Faculty | Faculty of Engineering, Built Environment and Information Technology |
| Module credits | 8.00 |
| Programmes | BEng Chemical Engineering BEng Chemical Engineering ENGAGE |
| Prerequisites | CLB 321 |
| Contact time | 1 tutorial per week, 2 lectures per week |
| Language of tuition | Module is presented in English |
| Department | Chemical Engineering |
| Period of presentation | Semester 2 |

Module content

Design economics and process evaluation. Cost estimation and time-value of money. Control applications, choice of instrumentation and development of a plantwide control strategy. Development of P&ID's. Safety: Site plan and layout, area classification, hazard and operability analysis (HAZOP). Occupational Safety and Health Act, Engineering Profession of South Africa Act. Requirements to maintain continued competence and to keep abreast of up-to date tools and techniques. ECSA code of conduct, Continuing Professional Development, ECSA outcomes, ECSA process and reasons for registration as PrEng. Displays understanding of the system of professional development. Accepts responsibility for own actions. Displays judgment in decision making during problem solving and design. Limits decision making to area of current competence. Reason about and make judgment on ethical aspects in case study context. Discerns boundaries of competence in problem solving and design. Case studies typical of engineering practice situations in which the graduate is likely to participate.

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