Engineering activity and group work 320 (MIA 320)

Qualification	Undergraduate
Faculty	Faculty of Engineering, Built Environment and Information Technology
Module credits	8.00
Programmes	BEng Chemical Engineering
	BEng Chemical Engineering Engage
	BEng Computer Engineering
	BEng Computer Engineering Engage
	BEng Electrical Engineering
	BEng Electrical Engineering Engage
	BEng Electronic Engineering
	BEng Electronic Engineering Engage
	BEng Industrial Engineering
	BEng Industrial Engineering Engage
	BEng Mechanical Engineering
	BEng Mechanical Engineering Engage
	BEng Metallurgical Engineering
	BEng Metallurgical Engineering Engage
	BEng Mining Engineering
	BEng Mining Engineering Engage
Prerequisites	No prerequisites.
Contact time	1 other contact session per week, 2 lectures per week
Language of tuition	English
Academic organisation	Mechanical and Aeronautical En
Period of presentation	Semester 2

Module content

Two exit learning outcomes (ELO) of ECSA are addressed and each must be passed in the same semester. ELO7: Demonstrate critical awareness of the impact of engineering activity on the social, industrial and physical environment. The history of engineering globally and in South Africa. Most important engineering projects globally and in South Africa. The impact of technology on society. Occupational and public health and safety. Occupational Health and Safety Act. Impacts on the physical environment. The personal, social, cultural values and requirements of those affected by engineering activity. The combination of social, workplace (industrial) and physical environmental factors are appropriate to the discipline of the qualification. ELO8: Demonstrate competence to work effectively on a small project as an individual, in teams and in multidisciplinary environments. Identifies and focuses on objectives. Works strategically. Executes tasks effectively. Delivers completed work on time. Effective team work: Makes individual contribution to team activity; performs critical functions; enhances work of fellow team members; benefits from support of team members; communicates effectively with team members; delivers completed work on time. Multidisciplinary work by the following: Acquires a working knowledge of co-workers' discipline; uses a systems engineering approach; communicates across disciplinary boundaries. Report and presentation on team project. Tasks require co-operation across at least one disciplinary boundary. Students acquire a working knowledge of co-workers discipline. Students communicate between disciplinary boundaries.