COURSE DETAILS
Course Code: B37VA
Full Course Title: Praxis Electronic Design
SCQF Level: 7
SCAF Credits: 15
Available as Elective: No

DELIVERY LEVEL
Undergraduate: Yes  Postgraduate Taught: No  Postgraduate Research: No

Additional Information:
Course being delivered at the specified campus(es) and also by collaborative partner - Ocean University of China on BEng Robotics Programme.

COURSE AIMS
• To provide a training in basic practical skills of Electrical Engineering
• To develop basic computer literacy and the use of standard programs
• To provide an introduction to personal development skills

LEARNING OUTCOMES – SUBJECT MASTERY
• Demonstrate basic practical laboratory skills in Electrical Engineering (SM1p, SM1s) (assessed by exam and coursework)
• Demonstrate a working electronic device (FM radio) (EA1p, EA1m, EA2p, EA2m) (assessed by lab demonstration)
• Communicate complex ideas and information via laboratory notebooks and factual reports (SM1p, SM1m) (assessed by lab report and assignments)
• Utilise on-line materials, assessments (formative and summative) and web links to support the learning process
• Use standard computer applications to obtain process and communicate a variety of information and data (SM1p, SM1m)(assessed by computer based assignments)
• Use to basic CAD tools (EA3p, EA3m) (assessed by assignments and report)
• Use a range of numerical and graphical skills (SM1p, SM1M) (assessed by lab reports and assignments)
• Use a range of numerical and graphical skills (SM1p, SM1m) (assessed by lab reports and assignments)
• Working in team environments (D6p, D6m) (assessed by group assignments)

LEARNING OUTCOMES – PERSONAL ABILITIES
The module is specifically designed to develop personal abilities and provides the opportunity to :
• Manage time effectively, work to deadlines and prioritise workloads
• Apply strategies for appropriate selection of relevant information from a wide source and large body of knowledge
• Practise the use of standard methods in the solution of routine problems within familiar contexts
B37VA Praxis Electronic Design

- Exercise some initiative and independence in carrying out defined activities
- Work with peer groups to discuss electrical and electronic problems
- Assess progress through the construction of a Personal Development profile
- An ability to relate theoretical derivations to experimental results.
- To work collectively with other students in tutorial and laboratory settings.
- To perform theoretical and experimental work competently, and to document such work in a clearly understandable fashion.

SYLLABUS

- Practical Electrical Engineering / construction, design and test
- Design and construction of an electronic device with simple design elements and test
- Practical computing: introduction to use of computer-aided design software
- Health and Safety issues pertaining to laboratory practice
- Research methodologies (use of hard copy and internet search facilities)
- Personal development planning and Records of Achievement

COURSE RELATIONSHIPS

N/A

LOCATION AND ASSESSMENT METHODS

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