# Liverpool John Moores University

| Title:   | PROFESSIONAL PRACTICE  |
|--|--|
| Status:  | Definitive   |
| Code:  | <b>7021ENG</b> (105392)  |
| Version Start Date:                                | 01-08-2016   |
| Owning School/Faculty:<br>Teaching School/Faculty: | Electronics and Electrical Engineering<br>Electronics and Electrical Engineering |

| Team       | Leader |
|------------|--------|
| Karl Jones | Y      |

| Academic<br>Level:          | FHEQ7 | Credit<br>Value:  | 10 | Total<br>Delivered<br>Hours: | 24 |
|-----------------------------|-------|-------------------|----|------------------------------|----|
| Total<br>Learning<br>Hours: | 100   | Private<br>Study: | 76 |                              |    |

#### **Delivery Options**

Course typically offered: Semester 1

| Component | Contact Hours |
|-----------|---------------|
| Lecture   | 12            |
| Seminar   | 12            |

# Grading Basis: 50 %

#### Assessment Details

| Category | Short<br>Description | Description                              | Weighting<br>(%) | Exam<br>Duration |
|----------|----------------------|--|------------------|------------------|
| Essay    | AS1                  | Literature search & Research<br>critique | 25               |                  |
| Essay    | AS2                  | Review of regulatory literature          | 25               |                  |
| Essay    | AS3                  | Case study                               | 25               |                  |
| Essay    | AS4                  |  | 25               |                  |

# Aims

To develop research and technical communication skills and awareness of the legal and ethical framework surrounding the activities of a professional engineer, including: personnel, health, safety, and risk (including environmental risk) issues.

# Learning Outcomes

After completing the module the student should be able to:

- 1 Critically appraise research, information and evidence and effectively and logically communicate findings in written form
- 2 Design experimental methods and undertake evaluative analysis of results
- 3 Demonstrate awareness of the legal framework (UK and EU) within which professional engineers work
- 4 Demonstrate awareness of the processes of risk assessment in engineering activities
- 5 Demonstrate understanding of the professional, ethical and moral responsibilities of a professional engineer

## Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

| Literature search & Research | 1 |   |
|------------------------------|---|---|
| Experimental Methods         | 2 |   |
| Review of regulatory lit.    | 3 | 4 |
| Ethics case study(ies)       | 4 | 5 |

## **Outline Syllabus**

Introduction to search methods, technical writing and speaking. Project planning, Time management, Gantt charts. Developments and trends in company organisations and management Legal framework: English and EU law, contract law, non-contractual law, intellectual property and patent law, and environmental law. Health and safety, assessment and management of risk in complex engineering

Health and safety, assessment and management of risk in complex engineering systems.

Professional ethics, codes of conduct and moral responsibility. Corporate Social Responsibility

## Learning Activities

Lectures supported by handouts. Seminar sessions will review and discuss a variety of ethical case studies. An individual student report is required for each coursework.

## Notes

This level 7 module provides a valuable opportunity for engineering graduates to

acquire the necessary skills and training to conduct research at postgraduate level, and to develop their professional conduct.