

## Liverpool John Moores University

Title: ENGINEERING IN EDUCATION  
Status: Definitive  
Code: **6018TECH** (106159)  
Version Start Date: 01-08-2016

Owning School/Faculty: Maritime and Mechanical Engineering  
Teaching School/Faculty: Maritime and Mechanical Engineering

Team	Leader
Andy Pettit	Y

**Academic Level:** FHEQ6  
**Credit Value:** 24  
**Total Delivered Hours:** 240  
**Total Learning Hours:** 240  
**Private Study:** 0

### Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Online	120
Practical	120

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	A weekly log book	20	
Essay	AS2	An end of module written report	30	
Essay	AS3	A 20 minute oral presentation	30	
Essay	AS4	An assessment by the teacher, moderated by the module leader	20	

### Aims

- 1. To help the student gain confidence in communicating their subject and develop strong organisational and interpersonal skills that will be of benefit to them in employment and in life.*
- 2. To enable the student to address the needs of individuals and to devise and*

*develop engineering projects and teaching methods appropriate to engage the relevant age group they are working with.*

*3.To allow the student to act as an enthusiastic role-model for pupils interested in engineering and to offer them a positive experience of working with pupils and teachers.*

## **Learning Outcomes**

After completing the module the student should be able to:

- 1 Address the needs of the individual
- 2 Have a knowledge of standard teaching methods
- 3 Prepare lesson plans and teaching materials
- 4 Be aware of staff responsibilities and conduct
- 5 Be able to handle difficult and potentially disruptive situations.
- 6 To have developed public speaking and communication skills

## **Learning Outcomes of Assessments**

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

CW	2	3	4		
CW	2	3			
CW	2	3	6		
CW	1	2	3	4	5

## **Outline Syllabus**

*Training and basic skills: The student will be given an initial introduction to relevant elements of the National Curriculum and its associated terminology.*

*Classroom observation, assistance and teaching: Initial contact with the teacher and pupils will be as a classroom assistant followed by specific teaching tasks.*

*Special project: The student will devise a special project based on their assessment of the needs of the pupils*

## **Learning Activities**

There are no formal lectures associated with this course. An initial day of training will provide the student with an introduction to working with children and the level of engineering teaching they will be participating in. A competitive interview system will be used to match students with appropriate schools and a specific teacher in the local area. This teacher will then act as a mentor and assessor to the student during the course. The teacher will offer guidance to the student during their weekly interaction, and through feedback and liaison with the University tutor will individually determine the level of responsibility and pupil interaction to be expected of the

student.

### **Notes**

This module allows the student to gain experience of working in a professional educational environment, during which time he/she will learn about the key issues affecting school education today