

## Liverpool John Moores University

Title: Masters Project  
Status: Definitive  
Code: **7140DRO** (120987)  
Version Start Date: 01-08-2016

Owning School/Faculty: General Engineering Research Institute  
Teaching School/Faculty: General Engineering Research Institute

Team	Leader
Frederic Bezombes	Y

**Academic Level:** FHEQ7  
**Credit Value:** 60  
**Total Delivered Hours:** 24  
**Total Learning Hours:** 600  
**Private Study:** 576

### Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Tutorial	24

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Presentation	MP-AS1	Project Planning document/Interim Report	20	
Dissertation	MP-AS2	Project Dissertation, 15-20,000 words	80	

### Aims

*The main aims of the project module are to demonstrate the student's ability to drive their own deep/thorough investigation, undertake high quality academic research and demonstrate critical evaluation of their results.*

### Learning Outcomes

After completing the module the student should be able to:

- 1 Undertake a structured research programme into an appropriate UAV application area
- 2 Formulate a research plan and manage the resulting activities
- 3 Demonstrate the ability to critically analyse and reflect on the work of other practitioners/researchers
- 4 Demonstrate a deep technical understanding of their project and associated field of UAV application
- 5 Produce and defend an academic thesis that demonstrates the standard of scholarly activity commensurate with a level 7 post-graduate qualification

### **Learning Outcomes of Assessments**

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

Presentation and Oral Exam	3	4			
Academic Dissertation	1	2	3	4	5

### **Outline Syllabus**

*Projects may involve combinations of: experiment, practical flight demonstrations, analysis, design and/or computation and should allow a student to demonstrate achievement of the module learning outcomes*

### **Learning Activities**

The project will be supported by regular tutorials with a project supervisor and occasional seminars on topics relating to research methods, critical writing/thinking and presentation skills.

### **Notes**

This is a very important module that represents 600 hours of self-driven scholarly activity.

For this module it is expected that a student would undertake a project in a area that offers a significant challenge to UAV operation. Project areas include, but are not limited to: design of new UAV's, development of new operational techniques, development and demonstration of new airborne sensing systems, development and testing of new navigation systems or control algorithms, new methods of airborne data analysis etc.

It is envisaged that most projects would have both a theoretical and an operational aspect.

Completion of the project module allows the student to concentrate fully on an area of work and hence develop a high level of subject knowledge and associated skills in that field.

Completion of the project requires the production of an academic thesis. The thesis is a level 7 piece of work and as such would be expected to demonstrate a high level of scholarly activity.

The choice of subject and formulation of the aims and objectives are mutually agreed between student and supervisor. Industrially based projects are acceptable as long as they offer the appropriate technical level and resources are available so as to ensure completion. Projects undertaken within the University would be judged by the same requirements.

The main criteria being that the project and associated thesis must demonstrate the student's ability to drive their own deep/thorough investigation and demonstrate critical evaluation of the results and comparison with other published ideas/results/designs. These requirements have to be evidenced via the presentation of a well-constructed, well-presented and well-defended academic thesis and good performance in an associated oral examination. The best projects are often associated with supervisors that are undertaking scholarly activity/research or associated with some experimental work being undertaken by industrial collaborators.