Module specification

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Module Code	ENG6B3
Module Title	Motorsport Practice
Level	6
Credit value	20
Faculty	FAST
HECoS Code	100206
Cost Code	GAME

Programmes in which module to be offered

Programme title	Is the module core or option for this programme
BEng (Hons) Automotive Engineering	Optional

Pre-requisites

None

Breakdown of module hours

Learning and teaching hours	20 hrs
Placement tutor support	0 hrs
Supervised learning e.g., practical classes, workshops	20 hrs
Project supervision (level 6 projects and dissertation modules only)	0 hrs
Total active learning and teaching hours	**40** hrs
Placement / work-based learning	100 hrs
Guided independent study	60 hrs
Module duration (total hours)	200 hrs

For office use only	
Initial approval date	22nd Aug 2022
With effect from date	Sept 2022
Date and details of revision	
Version number	1

Module aims

- To enable the student to develop, explain, critically understand and reflect on aspects of professional practice within motorsport.
- To provide a framework that include simulated industrial experience in a relevant area relating to the students choice of programme.

Module Learning Outcomes - at the end of this module, students will be able to:

1	Demonstrate critical and reflective skills by developing a motorsport engineering project or portfolio of projects
2	Analyse of a range of innovative, experimental and prototype for Motorsport application highlighting performance, efficiency, social, ethical, economic and sustainability constraints.
3	Make well-judged use of good communication skills, realistic costing, professional presentation and quality documentation realising that these are as essential in professional practice as the outcome of a project.

In addition to the module learning outcomes, students will also cover the following accreditation of higher education programme (AHEP) fourth edition learning outcomes: C12.

Assessment

Indicative Assessment Tasks:
This section outlines the type of assessment task the student will be expected to complete as part of the module. More details will be made available in the relevant academic year module handbook.

Students will be required to produce evidence of professional practice, which includes evaluative reports alongside their final solution briefs. In addition, students will be assessed on their ability to analyse, evaluate and synthesise the requirements of the module. Attendance, punctuality and contributions made in group discussion, seminars and critiques will also be considered when assessing student performance and learning in this module.

Criteria for assessment will be based on the students' professional dialogue and interpersonal skills, evaluative reports, and final presentations.

Portfolio should have a minimum word count of 4000 or equivalent.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)
1	1,2,3	Portfolio	100%

Derogations

A derogation from regulations has been approved for this programme which means that whilst the pass mark is 40% overall, each element of assessment (where there is more than one assessment) requires a minimum mark of 30%.

Learning and Teaching Strategies

This module should be investigative in nature but with some direction though discussion and practice in the university laboratories.

Students will establish motorsport practice and through visits, observation, research and case studies. A firm understanding of the professional requirements will be required to enable them to present their findings in unformal presentations where information can be delivered and group participants can debate other issues. Examples of acceptable and unacceptable practice are raised and scrutinised through a process of constructive analysis. Students will be required to consider the commercial constraints imposed in real life situations.

An active and inclusive approach is used to engage learners in the topics and will involve individual, group work and flipped learning experiences aligned to the university's Active Learning Framework (ALF). The approach offers students a flexible and adaptive learning experience that can accommodate a range of options that includes both on campus learning and remote learning where appropriate.

Indicative Syllabus Outline

Students may extend their professional skills through practice and/or industrial experience relating to their choice of programme. This may be undertaken on a team basis.

The student will be expected to produce design solutions in answer to a given brief and will be expected to document all their work, including where appropriate, stages of production through to final piece and concluding with an evaluation report.

Formula Student is expected to be the inspiration for much of the professional practice although other platforms will provide additional or alternative professional practice opportunities.

Indicative Bibliography:

Please note the essential reads and other indicative reading are subject to annual review and update.

Essential Reads

A. Livesey, *Practical Motorsport Engineering*. Routledge, 2018.

"Formula Student 202x", *ImechE FS Rule book and Team Handbook.* SAE Institute.

Other indicative reading

D. Norman, *The Design of Everyday Things*. Basic Books Inc., 2013.

Employability skills – the Glyndŵr Graduate

Each module and programme are designed to cover core Glyndŵr Graduate Attributes with the aim that each Graduate will leave Glyndŵr having achieved key employability skills as part of their study. The following attributes will be covered within this module either through the content or as part of the assessment. The programme is designed to cover all attributes and each module may cover different areas.

Core Attributes
Engaged
Enterprising
Creative
Ethical

Key Attitudes
Commitment
Curiosity
Resilience
Confidence
Adaptability

Practical Skillsets
Digital Fluency
Organisation
Leadership and Team working
Critical Thinking
Emotional Intelligence
Communication