Building Services Engineering Project

Module Information

2022.01, Approved

Summary Information

Module Code	6505ICBTBS
Formal Module Title	Building Services Engineering Project
Owning School	Civil Engineering and Built Environment
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 6
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

Partner Teaching Institution

Institution Name
International College of Business and Technology

Learning Methods

Learning Method Type	Hours
Lecture	10
Tutorial	10
Workshop	30

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-PAR	PAR	January	12 Weeks

Aims and Outcomes

Aims	To enable the student to work both collaboratively and individually on realistic projects that facilitate the development and integration of a range technical and professional skills within the context of building services.

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Work as part of a team to critically evaluate the requirements, risks, and implications of a clients brief for a building services engineering project
MLO2	2	Apply building services engineering technology and management procedures to produce, and evaluate, conceptual designs for building services projects and to progress these to detailed solutions.
MLO3	3	Produce documentation to demonstrate how the project was organised and managed professionally and effectively within the team.
MLO4	4	Present project solutions to an expert panel and critically evaluate the skills and competences demonstrated in the completion of the project against the relevant competence criteria of appropriate professional institutions.

Module Content

Outline Syllabus	The philosophy of Building Services Engineering design and the wider issues relating to the economic, financial, political, social and environmental aspects of design. Interpreting and assimilating the project brief for a specific building and client; client familiarisation, scope and requirements of the project, energy requirements, identification of legislative, health & safety and other constraints relevant to the specified building.Development and review of mechanical and electrical building services designs; identification of initial alternative options, selection of optimum solution via feasibility analysis and production of outline concept designs. Development of concept designs into detailed designs including supporting calculations, annotated drawings and equipment schedules. Use of industry standard software as analytical, design, calculation and management tools. Techniques for effective project management; Promoting and developing effective teamwork and communication strategies, teamwork roles and responsibilities. Project planning, time management, work allocation, progress review, maintaining standards and quality control, record keeping and documentation. Planning and preparation of formal presentation to an expert panel; use of presentation software, structuring a presentation, communicating at a level appropriate for the audience, techniques for answering questions, managing nerves. Personal professional development review.
Module Overview	
Additional Information	This module brings together the students' learning throughout their study and further develops the project work undertaken at levels 4 and 5. The module requires the students to demonstrate professional standards both in the production of solutions tobuilding services engineering projects and in the management of the process by which the solutions are developed in a team situation. Additionally, students will reflect on their professional development against the competence standardspublished by appropriate professional institutions.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping

Portfolio	Portfolio	65	0	MLO1, MLO2
Presentation	PRESENTATION	15	0	MLO4
Report	Report	20	0	MLO3

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Alison Cotgrave	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings