

Subject Description Form

Subject Code	ABCT4100
Subject Title	RESEARCH PROJECT
Credit Value	6
Level	4
Pre-requisite	Stage 1, 2 & 3 DSR core subjects
Objectives	The research project is related to work covered by the Course. The objectives of the research project are to promote independent and creative thinking, to train students to develop the academic and practical skills to define, investigate & analyses and solve a scientific/technical problem. The research project may involve a theoretical and/or experimental investigation of a fundamental or practical problem in chemical technology/ applied biology & biotechnology/ food safety & technology.
Intended Learning Outcomes	On successfully completion of this subject, students should be able to: a) conduct literature searches and critically assess the material; b) demonstrate the ability to carry out research work independently with creative thinking; c) identify, formulate and solve a research problem; d) generate hypothesis, design and conduct studies as well as to critically analyze and interpret data, and draw significant conclusions and/or improvements; e) organize and manage time efficiently; f) perform oral presentation and submit written report in an effective, skilful and professional manner
Subject Synopsis/ Indicative Syllabus	The Research Project may involve a theoretical and/or experimental investigation of a fundamental or practical problem in applied biology and biotechnology/ chemical technology/ food safety and technology. The investigation should include a significant research element.
Teaching/Learning Methodology	All projects will be the individual project. Each student registered in the project will have a project supervisor, who is normally a member of the academic staff. With guidance from the project supervisor, each student is encouraged to choose and propose his/her own project theme. After conducting literature searches and critically assessing the material, each student is required to submit a proposal and to carry out an independent research project in the laboratory. Supervisors meet with students regularly to monitor their progress. The major role of supervisor is to provide advice and guidance to the student throughout the development of the project. However, the supervisor shall make sure that the guidance leaves the student ample scope to demonstrate initiative for thinking and working independently and creatively. At the completion of the project, a written report and an oral presentation are required. The project is assessed by the achievement of proposed objectives, planning and execution of work, interpretation of results and presentation of results.

Assessment Methods in Alignment with Intended Learning Outcomes	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
			a	b	c	d	e	f
	1. Project preparation and efficient planning, organization, approach and execution of the project	15	√	√	√		√	
2. Project outcomes: originality and significance of work; knowledge and understanding of work; execution of methods; results and data analysis; interpretation of results and conclusions	60	√	√	√	√		√	
3. Written report (organization, style, clarity, fluency, effectiveness, grammar and spelling)	15	√	√	√	√		√	
4. Oral presentation and response to questions	10	√	√	√	√		√	
Total	100 %							
Student Study Effort Expected	Class contact:							
	▪ Guided Study							20 Hrs.
	▪ Guided Theoretical and/or Laboratory Investigation							50 Hrs.
	Other student study effort:							
	▪ Literature review							18 Hrs.
	▪ Independent Theoretical and/or Laboratory Investigation							92 Hrs.
	▪ Writing proposal and final report							60 Hrs.
	▪ Preparing presentation							20 Hrs.

	Total student study effort	260 Hrs.
Reading List and References	Related books and journal articles	