


1	Course Name:	Project I																																																																																																																																																																																																
	Course Code:	BACS3403																																																																																																																																																																																																
	Course Classification:	Major (core)																																																																																																																																																																																																
2	Synopsis:	This course will provide opportunity to the students to apply knowledge and skills they have learnt to investigate, analyze, and design a system based on a research topic or real-life scenario. The students will use appropriate technologies, such as database, Web technology, networking technology, etc. to design the proposed system. Besides, this course also allows students to gain project management skills so that they are able to deliver the system within a given time frame.																																																																																																																																																																																																
3	Name(s) of Academic Staff:	1	Refer to timetable																																																																																																																																																																																															
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4	Semester and Year offered:	Year Offered		Semester		Remarks: Refer to Programme Structure																																																																																																																																																																																												
5	Credit Value:	3																																																																																																																																																																																																
6	Pre-requisite/ co-requisite (if any):	BACS2042 Research Methods (for Bachelor of Computer Science (Honours) in Software Engineering only) Nil (for all other programmes)																																																																																																																																																																																																
7	Course Learning Outcomes (CLO) 	CLO1	Propose a project/research that includes contribution in terms of commercial value and/or societal impacts (A4, PLO10).																																																																																																																																																																																															
		CLO2	Select relevant resources as references for the planning, analysis and design activities of the project/research (C4, PLO6).																																																																																																																																																																																															
		CLO3	Outline approaches for creative and cost-effective solutions for projects/research (C4, PLO2).																																																																																																																																																																																															
		CLO4	Demonstrate their personal development in terms of responsibilities (A4, PLO8) .																																																																																																																																																																																															
8	Mapping of the Course Learning Outcomes to the Programme Learning Outcomes, Teaching Methods and Assessment Methods																																																																																																																																																																																																	
	<table border="1"> <thead> <tr> <th rowspan="2">Course Learning Outcomes</th> <th colspan="11">Programme Learning Outcomes (PLO)</th> <th rowspan="2">Teaching Methods</th> <th rowspan="2">Assessment Methods</th> </tr> <tr> <th>PLO 1</th> <th>PLO 2</th> <th>PLO 3</th> <th>PLO 4</th> <th>PLO 5</th> <th>PLO 6</th> <th>PLO 7</th> <th>PLO 8</th> <th>PLO 9</th> <th>PLO 10</th> <th>PLO 11</th> </tr> </thead> <tbody> <tr> <td>CLO1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>v</td> <td></td> <td></td> <td>O,NF2F</td> <td>Project Proposal</td> </tr> <tr> <td>CLO2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>v</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>O,NF2F</td> <td>Literature Review</td> </tr> <tr> <td>CLO3</td> <td></td> <td>v</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>O,NF2F</td> <td>Project Design/Research Methodology</td> </tr> <tr> <td>CLO4</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>v</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Progress Review</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="3">Mapping with MQF Cluster of Learning Outcomes</td> <td></td> <td>C2</td> <td></td> <td></td> <td></td> <td>C3D</td> <td></td> <td>C3F</td> <td></td> <td>C4B</td> <td></td> <td></td> <td rowspan="3"></td> <td rowspan="3"></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>												Course Learning Outcomes	Programme Learning Outcomes (PLO)											Teaching Methods	Assessment Methods	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10	PLO 11	CLO1										v			O,NF2F	Project Proposal	CLO2						v							O,NF2F	Literature Review	CLO3		v											O,NF2F	Project Design/Research Methodology	CLO4								v						Progress Review																																																													Mapping with MQF Cluster of Learning Outcomes		C2				C3D		C3F		C4B																										
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Indicate the primary causal link between the CLO and PLO by ticking 'v' in the appropriate box. <b>C1 = Knowledge &amp; Understanding, C2 = Cognitive Skills, C3A = Practical Skills, C3B = Interpersonal Skills, C3C = Communication Skills, C3D = Digital Skills, C3E = Numeracy Skills, C3F = Leadership, Autonomy &amp; Responsibility, C4A = Personal Skills, C4B = Entrepreneurial Skills, C5 = Ethics &amp; Professionalism</b>																																																																																																																																																																																																		
9	Transferable Skills (if applicable) <i>(Skills learned in the course of study which can be useful and utilized in other settings)</i> <table border="1"> <tr> <td>1</td> <td>Entrepreneurial Skills</td> </tr> <tr> <td>2</td> <td>Leadership, Autonomy and Responsibility</td> </tr> <tr> <td>3</td> <td>Cognitive skills</td> </tr> <tr> <td colspan="2">Open-ended response (if any)</td> </tr> <tr> <td>4</td> <td>Digital Skills</td> </tr> </table>												1	Entrepreneurial Skills	2	Leadership, Autonomy and Responsibility	3	Cognitive skills	Open-ended response (if any)		4	Digital Skills																																																																																																																																																																												
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10	Distribution of Student Learning Time (SLT) Note: This SLT calculation is designed for home grown programme only.													
Course Content Outline and Subtopics			CLO*	Learning and Teaching Activities**										Total SLT
				Face-to-Face (F2F)								NF2F Independent Learning (Asynchronous)		
				Physical				Online/ Technology-mediated (Synchronous)						
				L	T	P	O	L	T	P	O			
1	Project Planning and Proposal	1	-	-	-	2						16		
2	Requirements, Fact Gathering and Literature Review	2	-	-	-	3						24		
3	Requirements Analysis, Design Specification,Research Framework	2	-	-	-	3						20		
4	Present the research design with appropriate research framework and algorithm Application of appropriate software development models Represent the system design with appropriate modeling tools.	3	-	-	-	4						40		
5	Evaluation of the project management and responsibility. Evaluation of the research or system design	4	-	-	-	2						6		
6														
7														
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14														
15														
16														
17														
18														
19														
20														
SUB-TOTAL SLT:												120		
Continuous Assessment			%	Face-to-Face (F2F)								NF2F Independent Learning for Assessment (Asynchronous)		
				Physical				Online/ Technology-mediated (Synchronous)						
1	Project Proposal	20	-				-							
2	Literature Review	30	-				-							
3	Project Design/Research Methodology	40	-				-							
4	Progress Review	10	-				-							

5						
SUB-TOTAL SLT:						
Final Assessment		%	Face-to-Face (F2F)		NF2F Independent Learning for Assessment (Asynchronous)	
			Physical	Online/ Technology- mediated (Synchronous)		
1						
2						
3						
4						
5						
SUB-TOTAL SLT:						
SLT for Assessment:						
GRAND TOTAL SLT:						12
A	% SLT for F2F Physical Component: $[Total\ F2F\ Physical / (Total\ F2F\ Physical + Total\ F2F\ Online + Total\ Independent\ Learning) \times 100]$					11.6
B	% SLT for Online & Independent Learning Component: $[(Total\ F2F\ Online + Total\ Independent\ Learning) / (Total\ F2F\ Physical + Total\ F2F\ Online + Total\ Independent\ Learning) \times 100]$					88.3
C	% SLT for All Practical Component: $[%\ F2F\ Physical\ Practical + \% \ F2F\ Online\ Practical]$					0.0
C1	% SLT for F2F Physical Practical Component $[Total\ F2F\ Physical\ Practical / (Total\ F2F\ Physical + Total\ F2F\ Online + Total\ Independent\ Learning) \times 100]$					0.0
C2	% SLT for F2F Online Practical Component $[Total\ F2F\ Online\ Practical / (Total\ F2F\ Physical + Total\ F2F\ Online + Total\ Independent\ Learning) \times 100]$					0.0

Please tick (V) if this course is Industrial Training/ Clinical Placement/ Practicum using 50% of Effective Learning Time (ELT)

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Note:

\* Indicate the CLO based on the CLO's numbering in Item 8

\*\* For ODL programme: Courses with mandatory practical requirements imposed by the programme standards or any related standards can be exempted from complying to the minimum 80% ODL delivery rule in the SLT.

11	Identify special requirement or resources to deliver the course (e.g., software, nursery, computer lab, simulation room etc)	Nil
12	References (include required and further readings, and should be the most current)	<b>Main references supporting the course</b> 1. Tsui, F., Karam, O., & Bernal, B. (2023). <i>Essentials of Software Engineering</i> (5th ed.). Jones & Bartlett Learning. <a href="https://tarcez.tarc.edu.my/login?url=https://search.ebscohost.com/login.aspx?direct=true&amp;scope=site&amp;db=nlebk&amp;db=nlabk&amp;AN=3135670">https://tarcez.tarc.edu.my/login?url=https://search.ebscohost.com/login.aspx?direct=true&amp;scope=site&amp;db=nlebk&amp;db=nlabk&amp;AN=3135670</a> 2. Adams, K. A., & McGuire, E. K. (2023). <i>Research Methods, Statistics, and Applications</i> (3rd ed.). Sage. 3. Sundaramoorthy, S. (2022). <i>UML diagramming : a case study approach</i> . CRC Press. <a href="https://tarcez.tarc.edu.my/login?url=https://search.ebscohost.com/login.aspx?direct=true&amp;scope=site&amp;db=nlebk&amp;db=nlabk&amp;AN=3178384">https://tarcez.tarc.edu.my/login?url=https://search.ebscohost.com/login.aspx?direct=true&amp;scope=site&amp;db=nlebk&amp;db=nlabk&amp;AN=3178384</a>
13	Other additional information (if applicable)	Nil

Note: Number of PLO indicated is purely for illustration purposes only and the number is subjected to the curriculum design.