

Programme Educational Objectives (PEO)

After having exposed to 3 to 5 years working experience, our graduates should become professionals who demonstrate the following competencies:

Code	Intended Educational Objectives
PEO1	Obtain employment as computer scientists in local and global industries and organisations, where they are competent in applying the relevant knowledge, computational principles and skills in Computer Graphics and Multimedia fields to develop software of increasing size and complexity across different application areas
PEO2	Demonstrate an ability to continue to learn throughout their career (professional, technical or postgraduate education) which can strengthen their analytical and critical thinking skills to position them to advanced computer graphic and multimedia practices and to contribute to the intellectual foundations of the Computer Graphics and Multimedia disciplines.
PEO3	Involve in computer graphics and multimedia software projects that they are proficient in applying theoretical computing and knowledge in analysing, modelling, designing, developing and evaluating computing solutions.
PEO4	Becoming leaders or technopreneurs in graphics and multimedia software discipline with combination skills
PEO5	Demonstrate an awareness of professional ethics and social responsibility as computer scientists specialising in computer graphics and multimedia.

Programme Learning Outcomes (PLO)

After having completed the programme, graduates should be able to demonstrate the following competencies:

Code	Intended Learning Outcomes
PLO 1 (KW)	Ability to acquire and apply knowledge of Computer Sciences and Graphics and Multimedia Software fundamentals.
PLO 2 (CG)	Ability to demonstrate comprehensive problem analysis and creative design skill to solve and manage complex computing problems using systematic and current approaches
PLO 3 (PS)	Ability to demonstrate technical and scientific expertise in a field of graphics and multimedia software
PLO 4 (IPS)	Ability to perform effective collaboration with stakeholders professionally
PLO 5 (CS)	Ability to communicate effectively both in written and spoken form with other professionals and community
PLO 6 (DS)	Ability to use digital technologies and software to support studies competently
PLO 7 (NS)	Ability to analyse numerical or graphical data using quantitative or qualitative tools in solving problems
PLO 8 (LAR)	Ability to function individually or in teams, effectively, with a capability to be a leader.
PLO 9 (PRS)	Ability to self-advancement through continuous academic or professional development

PLO 10 (ENT)	Ability to initiate entrepreneurial project with relevant knowledge and expertise
PLO 11 (ETS)	Ability to conduct respectable, ethical and professional practices in organization and society

COURSE MENU

YEAR 1: SEMESTER 1			
Code	Course	Credit	Pre-requisite
SECI1013	Discrete Structure	3	
SECJ1013	Programming Technique I	3	
SECR1013	Digital Logic	3	
SECP1513	Technology & Information System	3	
UHMT1012	Graduate Success Attributes	2	
Malaysian Students			
UHS1022	Falsafah dan Isu Semasa	2	
UHMS1182	Penghayatan Etika dan Peradaban	2	
International Students			
UHLB1122*	English Communication Skills	2	
UHIT2302	The Thought of Sciences and Technology	2	
	TOTAL CREDIT	18	
	CUMULATIVE CREDITS	18	
* Students with minimum score of IELTS Band 5.5, TOEFL 525, TOEFL iBT 60, CEFR B2 and MUET Band 4 can apply for credit exemption for UHLB1112			

YEAR 1: SEMESTER 2			
Code	Course	Credit	Pre-requisite
SECV1113	Mathematics for Computer Graphics	3	
SECI1143	Probability & Statistical Data Analysis	3	
SECJ1023	Programming Technique II	3	SECJ1013
SECR1033	Computer Organisation and Architecture	3	SECR1013
Malaysian Students			
UHIT2302	The Thought of Sciences and Technology	2	
UHLB1122*	English Communication Skills	2	
International Students			
UHLM1012	Malaysia Language for Communication	2	
UHLB2122	Academic Communication Skills	2	
UHLB1122	English Communication Skills	2	
	TOTAL CREDIT	16	
	CUMULATIVE CREDITS	34	
* Students with minimum score of IELTS Band 5.5, TOEFL 525, TOEFL iBT 60, CEFR B2 and MUET Band 4 can apply for credit exemption for UHLB1112			

YEAR 2: SEMESTER 1			
Code	Course	Credit	Pre-requisite
SECD2523	Database	3	
SECD2613	System Analysis and Design	3	
SECJ2013	Data Structure and Algorithm	3	SECJ1023
SECR2213	Network Communications	3	
SECV2113	Human Computer Interaction	3	
UKQF2xx2	Service-Learning Co-curriculum Elective	2	
	TOTAL CREDIT	17	
	CUMULATIVE CREDITS	51	

YEAR 2: SEMESTER 2			
Code	Course	Credit	Pre-requisite
SECJ2203	Software Engineering	3	
SECV2223	Web Programming	3	
SECR2043	Operating Systems	3	SECR1033
SECJ2154	Object Oriented Programming	4	SECJ1023
<i>Elective Courses - Choose 1 (3 Credits)</i>			
SECV2213	Fundamental of Computer Graphics	3	SECV1113 SECJ1023
SECJ2363	Software Project Management	3	
Malaysian Students			
UHLB2122	Academic Communication Skills	2	
International Students			
UHS1022	Falsafah dan Isu Semasa	2	
UHMS1182	Penghayatan Etika dan Peradaban		
	TOTAL CREDIT	18	
	CUMULATIVE CREDITS	69	

YEAR 3: SEMESTER 1			
Code	Course	Credit	Pre-requisite
UHLB3132	Professional Communication Skills	2	
UHLx 1122	Foreign Language Elective	2	
UKQE 3001	Extracurricular Experiential Learning	1	
<i>Elective Courses - Choose 4 (13 Credits)</i>			
SECV3104	Applications Development	4	SECJ2203, SECD2523, SECV2223, SECJ2154
SECJ3553	Artificial Intelligence	3	SECJ2013
SECV3113	Geometric Modelling	3	SECV2213
SECV3213	Fundamental of Image Processing	3	
SECJ3263	Mobile Application Programming	3	SECJ2154
	TOTAL CREDIT	18	
	CUMULATIVE CREDITS	87	

YEAR 3: SEMESTER 2			
Code	Course	Credit	Pre-requisite
SECV3032	Graphics and Multimedia Software Project I	2	SECV3104
SECJ3203	Theory of Computer Science	3	SECI1013, SECJ2013
<i>Elective Courses - Choose 4 (12 Credits)</i>			
SECV3223	Multimedia Data Processing	3	SECJ1023
SECJ3563	Computational Intelligence	3	SECJ3553
SECV3263	Multimedia Web Programming	3	
SECV3233	Data Visualisation	3	
SECV3123	Real-time Computer Graphics	3	SECV2213
	TOTAL CREDIT	17	
	CUMULATIVE CREDITS	104	

YEAR 4: SEMESTER 1			
Code	Course	Credit	Pre-requisite
SECV4118	Industrial Training (HW)	8	92 credits & CGPA ≥ 2.0
SECV4114	Industrial Training Report	4	
	TOTAL CREDIT	12	
	CUMULATIVE CREDITS	116	

YEAR 4: SEMESTER 2			
Code	Course	Credit	Pre-requisite
SECV4134	Graphics and Multimedia Software Project II	4	SECV3032
SECD3761	Technopreneurship Seminar	1	
UBSS1032	Introduction to Entrepreneurship	2	
UXXX 2xx2	Enrichment of Knowledge Elective	2	
UXXX2XX2	Generic Skill Elective		
Elective Courses - Choose 2 (6 Credits)			
SECV4213	Computer Games Development	3	SECV3123
SECV4233	Advanced Computer Graphics	3	SECV2213
SECV4273	Introduction to Speech Recognition	3	SECJ1023
SECP5xx3/ SECJ5xx3/ SECR5xx3	PRISMS Elective 1	3	
SECP5xx3/ SECJ5xx3/ SECR5xx3	PRISMS Elective 2	3	
	TOTAL CREDIT	15	
	CUMULATIVE CREDITS	131	