COURSE MENU
CURICULLUM for BACHELOR OF COMPUTER SCIENCE (GRAPHICS AND MULTIMEDIA SOFTWARE)
4 YEAR PROGRAMME, INTAKE 2021/2022

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			
UHIS1022	Philosophy and Current Issues	2	
UHMS1182	Appreciation of Ethics and Civilizations	2	
International Students			
UHMS1182	Appreciation of Ethics and Civilizations	2	
UHIS1022	Philosophy and Current Issues		
UHLM1012	Malaysia Language for Communication	2	
	TOTAL CREDIT	18	
	CUMULATIVE CREDITS	18	

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	SCSJ1013
SECR2033	Computer Organisation and Architecture	3	SCSR1013
UHLB1122	English Communication Skills	2	
UHIT2302	Science and Technology Thinking	2	
	TOTAL CREDIT	16	
	CUMULATIVE CREDITS	34	

YEAR 2: SEMESTER 1			
Code	Course	Credit	Pre-requisite
SECD2523	Database	3	
SECD2613	System Analysis and Design	3	
SECJ2013	Data Structure and Algorithm	3	SECJ1013 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	SECJ1033
SECJ2154	Object Oriented Programming	4	SECJ1023
UHLB2122	Academic Communication Skills	2	
Elective Courses - Choose 1 (3 Credits)			
SECV2213	Fundamental of Computer Graphics	3	SECV1113 SECJ1023
SECJ2363	Software Project Management	3	
	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	
UKQT 3001	Extracurricular Experiential Learning	1	
Elective Courses - Choose 4 (13 Credits)			
SECV3104	Applications Development	4	
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
Elective Courses - Choose 4 (12 Credits)			
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
SECJ4118	Industrial Training (HW)	8	92 credits CGPA >= 2.0
SECJ4114	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	Generic Skills/ Knowledge Enhancement Elective	2	
Elective Courses - Choose 2 (6 Credits)			
SECV4213	Computer Games Development	3	SECJ1013
SECV4233	Advanced Computer Graphics	3	SECV2213
SECV4273	Introduction to Speech Recognition	3	SECJ1023
SECH5xx3/ SECD5xx3/ SECS5xx3	PRISMS Elective 1	3	
SECH5xx3/ SECD5xx3/ SECS5xx3	PRISMS Elective 2	3	
	TOTAL CREDIT	15	
	CUMULATIVE CREDITS	131	

PRISMS Elective Courses

The 5000 level courses indicate elective courses that are equivalent to core courses at master's level. Please refer to the handout on UTM's Bachelor-Master Integration Program (PRISMS) for further details, including eligibility. Please also consult your academic advisor for better clarification.

    i.   SCSJ4383 Software Construction
    ii.   SCSJ4423 Real-Time Software Engineering
   iii.   SCSJ4463 Agent-Oriented Software Engineering
   iv.   SECH5213 Cryptography Engineering
    v.   SECH5223 Digital Forensics and Social Engineering
   vi.   SECH5233 Information Security Risk and Governance
  vii.   SECH5243 Network and Internet Security
 viii.   SECH5253 Secure Software Engineering
   ix.   SECH5323 Law, Investigation & Ethics
    x.   SECH5333 Information Security Management System
   xi.   SECH5343 Secure Software Development
  xii.   SECH5353 Cyber Threat Intelligence
 xiii.   SECH5413 Security Architecture & Model
 xiv.   SECS5213 Advanced Theory of Computer Science
  xv.   SECS5233 Advanced Artificial Intelligence and Algorithms
 xvi.   SECD5213 Advanced Analytics for Data Science
xvii.   SECD5223 Big Data Management