

BACHELOR OF INFORMATION TECHNOLOGY (HONS) IN SOFTWARE ENGINEERING (BSE)
PROGRAMME STRUCTURE (FULL TIME)

YEAR 1: SEMESTER 1

NO	COURSE CODE	CATEGORY	PRE - REQ	COURSE NAME	CREDIT
1	ISB10103	Common Core		Principles of Computer Programming	3
2	IGB10403	Common Core		Discrete Mathematics for IT	3
3	INB23503	Common Core		IT Essentials	3
4	ISB16103	Discipline Core		Introduction to Software Engineering	3
5	WEB10302	University Compulsory		Fundamental English	2
6	MPU3192	MPU		Falsafah dan Isu Semasa / Philosophy and Current Issues (L)	2
	MPU3142			Bahasa Melayu Komunikasi 2 (I)	
				TOTAL	16

YEAR 1: SEMESTER 2

NO	COURSE CODE	CATEGORY	PRE - REQ	COURSE NAME	CREDIT
1	ISB16003	Common Core	ISB10103 Principles of Computer Programming	Object-Oriented Programming	3
2	ISB16204	Discipline Core		Computer Organization and Operating Systems	4
3	WEB20202	University Compulsory		Professional English 1	2
4	IEB20603	Common Core		Database Management Systems	3
5	IGB20303	Common Core		Probability and Statistics for IT	3
6	IEB20703	Common Core		Object-Oriented System Analysis and Design	3
TOTAL					18

YEAR 1: SEMESTER 3

NO	COURSE CODE	CATEGORY	PRE - REQ	COURSE NAME	CREDIT
1	W*D10101	University Compulsory		Foreign Language 1**	1
2	MPU3332	MPU		Isu-isu Kontemporari Muslim di Malaysia (L-M)	2
	MPU3342			Culture and Lifestyle in Malaysia 2 (L-NM & I)	
3	MPU34*2	MPU		Co-Curriculum*	2
4	MPU3182	MPU		Penghayatan Etika dan Peradaban (L)	2
	MPU3192			Falsafah dan Isu Semasa / Philosophy and Current Issues (I)	
	MPU3182			OR Penghayatan Etika dan Peradaban (I)	
				TOTAL	7

YEAR 2: SEMESTER 1

NO	COURSE CODE	CATEGORY	PRE - REQ	COURSE NAME	CREDIT
1	ISB30503	Discipline Core	ISB16003 Object-Oriented Programming	Data Structures and Algorithms	3
2	ISB26504	Discipline Core	ISB16003 Object-Oriented Programming	Software Design and Integration	4
3	ISB42503	Discipline Core	ISB10103 Principles of Computer Programming IEB20603 Database Management Systems	Internet Programming	3
4	ISB26404	Discipline Core		Software Requirements Engineering	4
5	W*D10201	University Compulsory	W*D10101 Foreign Language 1**	Foreign Language 2**	1
6		Elective		Elective 1***	3
TOTAL					18

YEAR 2: SEMESTER 2

NO	COURSE CODE	CATEGORY	PRE - REQ	COURSE NAME	CREDIT
1	MPU3242	MPU		Innovation Management	2
2	IEB21703	Discipline Core		Computer Network - A Business User's Approach	3
3	ISB36403	Discipline Core		Interaction Design	3
4	ISB26603	Discipline Core	ISB16003 Object-Oriented Programming	Mobile and Ubiquitous Computing	3
5		Elective		Elective 2***	3
6		Elective		Elective 3***	3
TOTAL					17

YEAR 2: SEMESTER 3

NO	COURSE CODE	CATEGORY	PRE - REQ	COURSE NAME	CREDIT
1	IDB30102	Common Core		Research Methodology	2
2	IDB30303	Discipline Core		IT Project Management	3
3	WEB20302	University Compulsory	WEB10302 Fundamental English, WEB20202 Professional English 1	Professional English 2	2
TOTAL					7

YEAR 3: SEMESTER 1

NO	COURSE CODE	CATEGORY	PRE - REQ	COURSE NAME	CREDIT
1	IPB49804	Final Year Project		Final Year Project 1	4
2	ISB38104	Discipline Core		Software Testing	4
3	ISB37804	Discipline Core	ISB16003 Object-Oriented Programming	Reuse and Component-Based Development	4
4	WBB20103	Common Core		Technopreneurship	3
TOTAL					15

YEAR 3: SEMESTER 2

NO	COURSE CODE	CATEGORY	PRE - REQ	COURSE NAME	CREDIT
1	IPB49906	Final Year Project	IPB49804 Final Year Project 1	Final Year Project 2	6
2	ISB37904	Discipline Core		Software Quality and Configuration Management	4
3		Elective		Open Elective	3
TOTAL					13

YEAR 3: SEMESTER 3

NO	COURSE CODE	CATEGORY	PRE - REQ	COURSE NAME	CREDIT
1	WIB42009	Industrial Training		Industrial Training	9
TOTAL					9

Additional Module** (Credit not included in Total Credit to Graduate –TCG)**

NO	COURSE CODE	CATEGORY	PRE - REQ	COURSE NAME	CREDIT
1	MPU3212	MPU		Bahasa Kebangsaan A	2
TOTAL					2

Total Credit to Graduate (TCG) : **120**

Co-Curriculum*

NO	COURSE CODE	CATEGORY	PRE - REQ	COURSE NAME	CREDIT
1	MPU3412	MPU		Career Guidance 2	2
2	MPU3422	MPU		Community Service 2	2
3	MPU3432	MPU		Culture 2	2
4	MPU3442	MPU		Rakan Masjid 2	2
5	MPU3452	MPU		Siswa Siswi Bomba & Penyelamat 2	2
6	MPU3462	MPU		Kor Siswa-Siswi Pertahanan Awam 2	2
7	MPU3472	MPU		Sports Management 2	2
8	MPU3482	MPU		Personal Financial Management 2	2
9	MPU3492	MPU		Askar Wataniah	2
10	MPU34102	MPU		Integriti & Anti - Rasuah	2
11	MPU34112	MPU		Huffaz Professional 2	2

Foreign Languages 1**

NO	COURSE CODE	CATEGORY	PRE - REQ	COURSE NAME	CREDIT
1	WAD10101	University Compulsory		Arabic 1	1
2	WFD10101	University Compulsory		French 1	1
3	WID10101	University Compulsory		Italian 1	1
4	WKD10101	University Compulsory		Korean Language 1	1
5	WMD10101	University Compulsory		Mandarin 1	1
6	WSD10101	University Compulsory		Spanish 1	1

Foreign Languages 2**

NO	COURSE CODE	CATEGORY	PRE - REQ	COURSE NAME	CREDIT
1	WAD10201	University Compulsory		Arabic 2	1
2	WFD10201	University Compulsory		French 2	1
3	WID10201	University Compulsory		Italian 2	1
4	WKD10201	University Compulsory		Korean Language 2	1
5	WMD10201	University Compulsory		Mandarin 2	1
6	WSD10201	University Compulsory		Spanish 2	1

Electives (Software Engineering)***

NO	COURSE CODE	CATEGORY	PRE - REQ	COURSE NAME	CREDIT
1	ISB42603	Elective	ISB16003 Object-Oriented Programming IEB 20603 Database Management Systems	Advanced Programming	3
2	ISB46103	Elective		Web Application Framework	3
3	ISB46203	Elective	ISB16003 Object Oriented Programming	Emerging Trend in Software Engineering	3
4	IKB21503	Elective		Secure Software Development	3

Electives (Automation and Robotics)***

NO	COURSE CODE	CATEGORY	PRE - REQ	COURSE NAME	CREDIT
1	ISB46903	Elective	ISB16003 Object-Oriented Programming IEB20703 Object Oriented Analysis and Design	Automated Fare Collection Technology	3
2	ISB37503	Elective	ISB16003 Object-Oriented Programming	Real Time and Embedded Systems	3
3	ISB47103	Elective	ISB16003 Object Oriented Programming IGB20303 Probability and Statistics for IT	Computer Vision	3

Electives (Applied Data Science)***

NO	COURSE CODE	CATEGORY	PRE - REQ	COURSE NAME	CREDIT
1	ISB46703	Elective	ISB16003 Object-Oriented Programming	Principles of Artificial Intelligence	3
2	IBB32403	Elective		Data Science Essential	3
3	ISB47003	Elective	ISB16003 Object-Oriented Programming IGB20303 Probability and Statistics for IT	Machine Learning	3

Note :

1. **Additional Module - MPU3212 Bahasa Kebangsaan A**

- a. For local students without credit in B. Melayu (SPM) only and the credit is not included in program Total Credit to Graduate (TCG).

2. Legend :

- a. (L) – For Local Students
b. (I) - For International Students
c. (L-M) – For Local Muslim Students
d. (L-NM) – For Local Non-Muslim Students