BACHELOR OF INFORMATION TECHNOLOGY WITH HONOURS

YEAR 1

SEMESTER 1
- ENGLISH LANGUAGE I
- APPRECIATION OF ETHICS AND CIVILIZATION
- CO-CURRICULUM I
- HUMAN-COMPUTER INTERACTION
- FUNDAMENTALS OF PROGRAMMING
- COMPUTATIONAL MATHEMATICS
- FUNDAMENTALS OF ENTREPRENEURSHIP

SEMESTER 2
- ENGLISH LANGUAGE II
- CO-CURRICULUM II
- PHILOSOPHY AND CURRENT ISSUES
- DATA STRUCTURE
- DISCRETE MATHEMATHICS
- CYBER SECURITY
- ENTREPRENEURIAL BEHAVIOURS

YEAR 2

SEMESTER 3
- ENGLISH FOR SCIENCE
- LINEAR ALGEBRA
- SYSTEM ANALYSIS AND DESIGN
- OBJECT-ORIENTED PROGRAMMING
- DATABASE
- STRATEGIC ENTREPRENEURSHIP/ CORPORATE ENTREPRENEURSHIP

SEMESTER 4
- PROBABILITY AND STATISTICS
- INTERNET OF THINGS
- APPLICATION DEVELOPMENT
- INFORMATION TECHNOLOGY MANAGEMENT PROJECT
- MANAGEMENT & NEW ENTERPRISE DEVELOPMENT/ INNOVATION MANAGEMENT IN ENTREPRENEURSHIP

TRACK IN DATA SCIENCE

TRACK IN ARTIFICIAL INTELLIGENCE

TRACK IN DATA SCIENCE

YEAR 3

SEMESTER 5
- DIGITAL ENTREPRENEURSHIP I
- INTRODUCTION TO DATA SCIENCE
- PRACTICES IN BIG DATA I
- ELECTIVE I
- CAPSTONE I
- FOREIGN LANGUAGE I

SEMESTER 6
- DIGITAL ENTREPRENEURSHIP II
- CAPSTONE II
- ELECTIVE II
- DATA MINING AND APPLICATIONS
- FOREIGN LANGUAGE II
- FINAL YEAR PROJECT I

YEAR 4

SEMESTER 7
- SCIENTIFIC VISUALIZATION
- ELECTIVE III
- STUDENT PROGRAMS IN ENTERPRISE
- FINAL YEAR PROJECT II

SEMESTER 8
- INDUSTRIAL TRAINING

TRACK IN ARTIFICIAL INTELLIGENCE

YEAR 3

SEMESTER 5
- DIGITAL ENTREPRENEURSHIP I
- PRACTICES IN ARTIFICIAL INTELLIGENCE I
- COMPUTATIONAL INTELLIGENCE
- ELECTIVE I
- CAPSTONE I
- FOREIGN LANGUAGE I

SEMESTER 6
- DIGITAL ENTREPRENEURSHIP II
- CAPSTONE II
- ELECTIVE II
- MACHINE LEARNING
- FOREIGN LANGUAGE II
- FINAL YEAR PROJECT I

YEAR 4

SEMESTER 7
- EVOLUTIONARY COMPUTING
- ELECTIVE III
- STUDENT PROGRAMS IN ENTERPRISE
- FINAL YEAR PROJECT II

SEMESTER 8
- INDUSTRIAL TRAINING

CURRICULUM STRUCTURE

Curriculum Component	MQA Program Standard - Computing (%)[b]		Curriculum At UMK	
	Credit Hour	Percentage (%)	Credit	Credit Hour
General Course	10 – 14	8 – 12	16	12.70
Core Course	33 – 45	28 – 38	42	33.33
Elective Course	27 – 67	23 – 56	36	28.57
Final Year Project	6 – 11	5 – 8	6	4.76
Industrial Training	6 – 12	5 – 10	12	9.52
Optional Course (Entrepreneurship UMK)	12 – 30	10 – 25	14	11.11
Total		120	126	100

STUDY PLAN

YEAR	COMPONENT	SEMESTER 1			SEMESTER 2		
		CODE	COURSE	CREDIT	CODE	COURSE	CREDIT
1	**GENERAL COURSE**	UBI1012	ENGLISH LANGUAGE I	2	UBI1022	ENGLISH LANGUAGE II	2
		USK10202	APPRECIATION OF ETHICS AND CIVILIZATION	2	UK_1_1	CO-CURRICULUM II	1
		UK_1_1	CO-CURRICULUM I	1	USK10102	PHILOSOPHY AND CURRENT ISSUES	2
	CORE COURSE	JIT10603	HUMAN-COMPUTER INTERACTION	3	JIT10403	DATA STRUCTURE	3
		JIT10203	FUNDAMENTALS OF PROGRAMMING	3	JIT10503	DISCRETE MATHEMATHICS	3
		JIT10303	COMPUTATIONAL MATHEMATICS	3	JIT10703	CYBER SECURITY	3
	OPTIONAL COURSE (Entrepreneurship UMK)	AFT1013	FUNDAMENTALS OF ENTREPRENEURSHIP	3	APT2013	ENTREPRENEURIAL BEHAVIOURS	3
	TOTAL CREDIT			17			17

YEAR	COMPONENT	SEMESTER 3			SEMESTER 4		
		CODE	COURSE	CREDIT	CODE	COURSE	CREDIT
2	**GENERAL COURSE**	UBI2012	ENGLISH FOR SCIENCE	2			
	CORE COURSE	JIT20803	LINEAR ALGEBRA	3	JIT21203	PROBABILITY AND STATISTICS	3
		JIT20903	SYSTEM ANALYSIS AND DESIGN	3	JIT21303	INTERNET OF THINGS	3
		JIT21003	OBJECT-ORIENTED PROGRAMMING	3	JIT21403	APPLICATION DEVELOPMENT	3
		JIT21103	DATABASE	3	JIT21503	INFORMATION TECHNOLOGY MANAGEMENT PROJECT	3
	OPTIONAL COURSE (Entrepreneurship UMK)	AFT3093/ APT3083	STRATEGIC ENTREPRENEURSHIP/ CORPORATE ENTREPRENEURSHIP	3	APT2053/ AFT2023	MANAGEMENT & NEW ENTERPRISE DEVELOPMENT/ INNOVATION MANAGEMENT IN ENTREPRENEURSHIP	3
	TOTAL CREDIT			17			15

ELECTIVE (DATA SCIENCE STREAM)

YEAR	COMPONENT	SEMESTER 5			SEMESTER 6		
		CODE	COURSE	CREDIT	CODE	COURSE	CREDIT
3	SPECIALIZATION COURSE	JIE31703	DIGITAL ENTREPRENEURSHIP I	3	JIE32003	DIGITAL ENTREPRENEURSHIP II	3
		JIE31803	INTRODUCTION TO DATA SCIENCE	3	JIE32104	CAPSTONE II	4
		JIE31904	PRACTICES IN BIG DATA I	4	JIE33_04	ELECTIVE II	4
		JIE33_04	ELECTIVE I	4	JIE32203	DATA MINING AND APPLICATIONS	3
		JIE32602	CAPSTONE I	2			
	OPTIONAL COURSE	UB_2_2	FOREIGN LANGUAGE I	2	UB_2_2	FOREIGN LANGUAGE II	2
	FINAL YEAR PROJECT				JIT32302	FINAL YEAR PROJECT I	2
	TOTAL CREDIT			18			18

YEAR	COMPONENT	SEMESTER 7			SEMESTER 8		
		CODE	COURSE	CREDIT	CODE	COURSE	CREDIT
4	SPECIALIZATION COURSE	JIE42403	SCIENTIFIC VISUALIZATION	3			
		JIE43_03	ELECTIVE III	3			
	OPTIONAL COURSE(Entrepreneurship UMK)	JFT4082	STUDENT PROGRAMS IN ENTERPRISE	2			
	FINAL YEAR PROJECT	JIT42504	FINAL YEAR PROJECT II	4			
	INDUSTRIAL TRAINING				JIT42612	INDUSTRIAL TRAINING	12
	TOTAL CREDIT			12			12

OPTIONAL ELECTIVES **

COMPONENT	SEMESTER 5 & 6		
	CODE	KURSUS	CODE
SPECIALIZATION COURSE	JIE31804	PRACTICES IN ARTIFICIAL INTELLIGENCE II	**4**
	JIE33004	PRACTICES IN BIG DATA I	**4**
	JIE33104	PRACTICES IN BIG DATA II	**4**
	SEMESTER 7		
	JIE43203	NATURAL LANGUAGE PROCESSING	**3**
	JIE32803	IMAGE PROCESSING AND COMPUTER VISION	**3**
	JIE43303	INTRODUCTION TO DATA SCIENCE	**3**