

PENAMBAHBAIKAN HASIL PEMBELAJARAN DALAM STANDARD PROGRAM

Standard Program: Komputeran

A. Objektif Pembelajaran Program (Programme Educational Objective, PEO)

TAHAP	MATLAMAT PROGRAM YANG DINYATAKAN DALAM STANDARD PROGRAM SEDIA ADA	PENAMBAHBAIKAN YANG DILULUSKAN
Certificate (Level 3, MQF)	<p><i>The programme aims for a Certificate are to train graduates who:</i></p> <ul style="list-style-type: none"> <i>i. possess basic knowledge and skills in computing;</i> <i>ii. can utilise computing tools and techniques by applying knowledge and interpreting information to solve problems;</i> <i>iii. can execute routine tasks and are proficient in the use of relevant tools in their area of training;</i> <i>iv. can perform IT support services;</i> <i>v. have communication, team and interpersonal skills, and are aware of their</i> <i>vi. social and ethical responsibilities; and</i> <i>vii. possess skills for lifelong learning and career development.</i> 	<p><i>The aims of a Certificate Programme are to train:</i></p> <ul style="list-style-type: none"> <i>i. computer technicians having knowledge with appropriate numeracy and technical skills to solve routine problems in computing.</i> <i>ii. computer technicians having leadership skills and can communicate with good interpersonal skills when interacting in work environment.</i> <i>iii. computer technicians having positive attitudes, skills for lifelong learning and entrepreneurial mind-set for self and career development.</i> <i>iv. computer technicians who are committed to ethical and professional practices in the organization and society.</i>
Diploma (Level 4, MQF)	<p><i>Generic Programme aims for a Diploma are to prepare graduates who:</i></p> <ul style="list-style-type: none"> <i>i. possess relevant knowledge, skills and aptitude to meet job specifications;</i> <i>ii. can utilise current computing tools and techniques by applying knowledge and interpreting information to solve problems;</i> <i>iii. can execute and be responsible for routine tasks;</i> <i>iv. have effective communication skills to convey information, problems and solutions;</i> <i>v. have team and interpersonal skills, and are aware of their social and ethical responsibilities; and</i> 	<p><i>The aims of a Diploma Programme are to train:</i></p> <ul style="list-style-type: none"> <i>i. computer technicians having knowledge with numeracy and technical skill to solve basic problems in computing in line with the industry requirements and standards.</i> <i>ii. computer technicians having leadership skills and communicate effectively with good interpersonal skills when interacting in work environment.</i> <i>iii. computer technicians having positive attitudes, commitment to lifelong learning and entrepreneurial mind-set for self and career development.</i>

TAHAP	MATLAMAT PROGRAM YANG DINYATAKAN DALAM STANDARD PROGRAM SEDIA ADA	PENAMBAHBAIKAN YANG DILULUSKAN
	<ul style="list-style-type: none"> vi. <i>possess skills for lifelong learning and career development.</i> 	<ul style="list-style-type: none"> iv. <i>computer technicians who are committed to ethical and professional practices in the organization and society.</i>
<p><i>Bachelor's Degree (Level 6, MQF)</i></p>	<p><i>Generic programme aims for a Bachelor's Degree are to prepare graduates who:</i></p> <ul style="list-style-type: none"> i. <i>possess skills for lifelong learning, research and career development;</i> ii. <i>have communication, team, leadership and interpersonal skills, and aware of the social, ethical and legal responsibilities; and</i> iii. <i>have entrepreneurial skill and a broad business and real world perspective.</i> 	<p><i>The aims of a Bachelor Programme are to train:</i></p> <ul style="list-style-type: none"> i. <i>computing practitioners who are able to adopt appropriate methodologies and techniques to provide computing solutions based on relevant knowledge and technical skills in the fields of study in line with the industry requirements.</i> ii. <i>computing practitioners having leadership skills, autonomy and responsibility and communicate effectively with discipline-related stakeholders.</i> iii. <i>computing practitioners having positive attitudes, commitment for lifelong learning and entrepreneurial mind-set within industry for self and career progression.</i> iv. <i>computing practitioners who uphold ethical and professional practices in maintaining self and profession integrity.</i>
<p><i>Master's Degree (Level 7, MQF)</i></p>	<p><i>The programme aims for a Master's level are to:</i></p> <ul style="list-style-type: none"> i. <i>provide graduates with advanced knowledge and skills in computing;</i> ii. <i>equip graduates with advanced theoretical principles and scientific methods to create effective solutions to problems and to evaluate them;</i> iii. <i>train graduates to work on a project in which they propose, design, build, test, analyse, and deliver a computing solution to meet appropriate computing standards and realistic constraints;</i> iv. <i>instill graduates with skills to seek knowledge through lifelong learning;</i> 	<p><i>The aims of a Master Programme are to train:</i></p> <ul style="list-style-type: none"> i. <i>computing practitioners having advanced knowledge in the fields of study capable of adopting best methodologies and techniques to provide innovative solutions for current issues in computing.</i> ii. <i>computing practitioners who has leadership skills and able to communicate as well as interact effectively with diverse stakeholders.</i> iii. <i>computing practitioners having positive attitudes, engaging in lifelong learning activities and entrepreneurial mind-set for successful career.</i>

TAHAP	MATLAMAT PROGRAM YANG DINYATAKAN DALAM STANDARD PROGRAM SEDIA ADA	PENAMBAHBAIKAN YANG DILULUSKAN
	<ul style="list-style-type: none"> v. equip graduates with the ability to supervise and carry out research under supervision; vi. develop graduates' effective communication skills in both written and oral form; and vii. inculcate graduates with professional and ethical responsibilities as well as understanding the possible social, economic, cultural, legal and environmental impact of their computing solutions in the global context. 	<ul style="list-style-type: none"> iv. computing practitioners who uphold and defend ethical and professional practices in maintaining self and profession integrity.
<p><i>Doctoral Degree (Level 8, MQF)</i></p>	<p><i>The programme aims for a Doctoral level are to:</i></p> <ul style="list-style-type: none"> i. prepare competent practitioners/researchers with a firm grounding in computing who can foster research and development of new knowledge in specific areas; ii. equip practitioners/researchers with in depth knowledge of computing and a focused understanding in the area of expertise; iii. prepare practitioners/researchers who can apply skills and principles of lifelong learning in academic and career development; iv. develop practitioners'/researchers' effective communication skills in both written and oral form; v. equip practitioners/researchers with the ability to supervise and carry out independent research; and vi. inculcate practitioners/researchers with professional and ethical responsibilities as well as understanding the possible social, economic, cultural, legal and environmental impact of their computing solutions in the global context. 	<p><i>The aims of a Doctoral Programme are to train:</i></p> <ul style="list-style-type: none"> i. computing practitioners who are competent with a firm grounding in computing fields to foster research and development of new knowledge in the fields of study. ii. computing practitioners who lead in their areas of expertise and able to communicate convincingly and interact effectively with diverse stakeholders. iii. computing practitioners having positive attitudes, actively engaging in lifelong learning activities and entrepreneurial mind-set for successful career. iv. computing practitioners who uphold and defend ethical and professional practices in advancing the profession while maintaining self and profession integrity.

B. Hasil Pembelajaran Program (Programme Learning Outcome, PLO)

TAHAP	HASIL PEMBELAJARAN YANG DINYATAKAN DALAM STANDARD PROGRAM SEDIA ADA	PENAMBAHBAIKAN YANG DILULUSKAN																					
<p><i>Certificate (Level 3, MQF)</i></p>	<p><i>Upon completion of the programme, graduates should be able to:</i></p> <ul style="list-style-type: none"> <i>i. demonstrate an understanding of basic knowledge and skills in their area of concentration;</i> <i>ii. utilise computing tools and techniques to solve problems related to the area of concentration;</i> <i>iii. perform a range of support tasks such as installation, configuration, basic maintenance and data entry;</i> <i>iv. execute instructions as described in user and technical manuals;</i> <i>v. communicate effectively with peers, clients, superiors and society at large;</i> <i>vi. demonstrate teamwork, interpersonal, and social skills;</i> <i>vii. apply skills and principles of lifelong learning in academic and career development; and</i> <i>viii. demonstrate professionalism, social and ethical considerations in accordance with ethical and legal principles.</i> 	<table border="1"> <thead> <tr> <th data-bbox="1043 400 1680 435">LO</th> <th data-bbox="1680 400 2033 435">MQF Domain</th> </tr> </thead> <tbody> <tr> <td data-bbox="1043 435 1680 507"> <p><i>Upon completion of the programme, graduates should be able to:</i></p> </td> <td data-bbox="1680 435 2033 507"></td> </tr> <tr> <td data-bbox="1043 507 1680 579"> <p><i>i. explain basic knowledge of computing related to job function;</i></p> </td> <td data-bbox="1680 507 2033 579"> <p>1. Knowledge & Understanding</p> </td> </tr> <tr> <td data-bbox="1043 579 1680 679"> <p><i>ii. apply computing tools and techniques to solve routine problems as described in user and technical manuals;</i></p> </td> <td data-bbox="1680 579 2033 679"> <p>2. Cognitive Skills 3. Practical Skills</p> </td> </tr> <tr> <td data-bbox="1043 679 1680 815"> <p><i>iii. perform a range of support tasks such as installation, configuration, basic maintenance and data entry by applying digital and numerical skills;</i></p> </td> <td data-bbox="1680 679 2033 815"> <p>3. Practical Skills 6. Digital Skills 7. Numeracy Skills</p> </td> </tr> <tr> <td data-bbox="1043 815 1680 916"> <p><i>iv. communicate and interact with peers, clients, superiors and society under work related environment;</i></p> </td> <td data-bbox="1680 815 2033 916"> <p>4. Interpersonal Skills 5. Communication Skills</p> </td> </tr> <tr> <td data-bbox="1043 916 1680 1016"> <p><i>v. demonstrate leadership skills and responsibility in executing instructions related to job function;</i></p> </td> <td data-bbox="1680 916 2033 1016"> <p>8. Leadership, Autonomy & Responsibility</p> </td> </tr> <tr> <td data-bbox="1043 1016 1680 1117"> <p><i>vi. apply skills and principles of lifelong learning in academic and career development;</i></p> </td> <td data-bbox="1680 1016 2033 1117"> <p>9. Personal Skills</p> </td> </tr> <tr> <td data-bbox="1043 1117 1680 1189"> <p><i>vii. demonstrate entrepreneurial mind set in performing tasks; and</i></p> </td> <td data-bbox="1680 1117 2033 1189"> <p>10. Entrepreneurial Skills</p> </td> </tr> <tr> <td data-bbox="1043 1189 1680 1294"> <p><i>viii. commit to professional and ethical practices in executing instructions related to job function.</i></p> </td> <td data-bbox="1680 1189 2033 1294"> <p>11. Ethics & Professionalism</p> </td> </tr> </tbody> </table>	LO	MQF Domain	<p><i>Upon completion of the programme, graduates should be able to:</i></p>		<p><i>i. explain basic knowledge of computing related to job function;</i></p>	<p>1. Knowledge & Understanding</p>	<p><i>ii. apply computing tools and techniques to solve routine problems as described in user and technical manuals;</i></p>	<p>2. Cognitive Skills 3. Practical Skills</p>	<p><i>iii. perform a range of support tasks such as installation, configuration, basic maintenance and data entry by applying digital and numerical skills;</i></p>	<p>3. Practical Skills 6. Digital Skills 7. Numeracy Skills</p>	<p><i>iv. communicate and interact with peers, clients, superiors and society under work related environment;</i></p>	<p>4. Interpersonal Skills 5. Communication Skills</p>	<p><i>v. demonstrate leadership skills and responsibility in executing instructions related to job function;</i></p>	<p>8. Leadership, Autonomy & Responsibility</p>	<p><i>vi. apply skills and principles of lifelong learning in academic and career development;</i></p>	<p>9. Personal Skills</p>	<p><i>vii. demonstrate entrepreneurial mind set in performing tasks; and</i></p>	<p>10. Entrepreneurial Skills</p>	<p><i>viii. commit to professional and ethical practices in executing instructions related to job function.</i></p>	<p>11. Ethics & Professionalism</p>	
		LO	MQF Domain																				
		<p><i>Upon completion of the programme, graduates should be able to:</i></p>																					
		<p><i>i. explain basic knowledge of computing related to job function;</i></p>	<p>1. Knowledge & Understanding</p>																				
		<p><i>ii. apply computing tools and techniques to solve routine problems as described in user and technical manuals;</i></p>	<p>2. Cognitive Skills 3. Practical Skills</p>																				
		<p><i>iii. perform a range of support tasks such as installation, configuration, basic maintenance and data entry by applying digital and numerical skills;</i></p>	<p>3. Practical Skills 6. Digital Skills 7. Numeracy Skills</p>																				
		<p><i>iv. communicate and interact with peers, clients, superiors and society under work related environment;</i></p>	<p>4. Interpersonal Skills 5. Communication Skills</p>																				
		<p><i>v. demonstrate leadership skills and responsibility in executing instructions related to job function;</i></p>	<p>8. Leadership, Autonomy & Responsibility</p>																				
		<p><i>vi. apply skills and principles of lifelong learning in academic and career development;</i></p>	<p>9. Personal Skills</p>																				
		<p><i>vii. demonstrate entrepreneurial mind set in performing tasks; and</i></p>	<p>10. Entrepreneurial Skills</p>																				
<p><i>viii. commit to professional and ethical practices in executing instructions related to job function.</i></p>	<p>11. Ethics & Professionalism</p>																						

TAHAP	HASIL PEMBELAJARAN YANG DINYATAKAN DALAM STANDARD PROGRAM SEDIA ADA	PENAMBAHBAIKAN YANG DILULUSKAN	
<p><i>Diploma (Level 4, MQF)</i></p>	<p><i>Upon completion of the programme, graduates should be able to:</i></p> <ul style="list-style-type: none"> <i>i. communicate effectively with peers, clients, superiors and society at large;</i> <i>ii. demonstrate the ability to articulate and document work-flow and processes during project development;</i> <i>iii. demonstrate teamwork, interpersonal, entrepreneurial and social skills;</i> <i>iv. apply skills and principles of lifelong learning in academic and career development; and</i> <i>v. demonstrate professionalism and social and ethical considerations in accordance with ethical and legal principles.</i> <p>A. Computer Science or Software Engineering</p> <ul style="list-style-type: none"> <i>i. develop and write computer programmes using at least one industry relevant general purpose programming language;</i> <i>ii. analyse a problem, model and design a solution, implement and test projects to meet real world needs;</i> <i>iii. select appropriate data structure and basic algorithms for software solutions;</i> <i>iv. use industry relevant methods and tools to manage, configure and develop computer-based systems; and</i> <i>v. apply industry standard practices in software development life cycle.</i> 		
		LO	MQF Domain
		<p><i>Upon completion of the programme, graduates should be able to:</i></p>	
		<ul style="list-style-type: none"> <i>i. communicate effectively and interact with peers, clients, superiors and society under work related environment;</i> 	<ul style="list-style-type: none"> <i>4. Interpersonal Skills</i> <i>5. Communication Skills</i>
		<ul style="list-style-type: none"> <i>ii. utilised digital and numeracy skills in performing tasks related to job function;</i> 	<ul style="list-style-type: none"> <i>6. Digital Skills</i> <i>7. Numeracy Skills</i>
		<ul style="list-style-type: none"> <i>iii. demonstrate leadership skills and responsibility in executing instructions related to job function;</i> 	<ul style="list-style-type: none"> <i>8. Leadership, Autonomy & Responsibility</i>
		<ul style="list-style-type: none"> <i>iv. commit to principles of lifelong learning in academic and career development;</i> 	<ul style="list-style-type: none"> <i>9. Personal Skills</i>
		<ul style="list-style-type: none"> <i>v. apply entrepreneurial mind set in performing tasks under changing industry landscape; and</i> 	<ul style="list-style-type: none"> <i>10. Entrepreneurial Skills</i>
		<ul style="list-style-type: none"> <i>vi. commit to professional and ethical practices in executing instructions related to job and organizational functions.</i> 	<ul style="list-style-type: none"> <i>11. Ethics & Professionalism</i>
		A. Computer Science or Software Engineering	
		<ul style="list-style-type: none"> <i>i. apply knowledge relating to Computer Science or Software Engineering;</i> 	<ul style="list-style-type: none"> <i>1. Knowledge & Understanding</i> <i>2. Cognitive Skills</i>
		<ul style="list-style-type: none"> <i>ii. solve problems, suggest and implement solutions or projects and test models to meet desired needs within realistic constraints; and</i> 	<ul style="list-style-type: none"> <i>2. Cognitive Skills</i>
		<ul style="list-style-type: none"> <i>iii. use industry relevant methods and tools to manage, configure and develop computer-based systems.</i> 	<ul style="list-style-type: none"> <i>3. Practical Skills</i>

TAHAP	HASIL PEMBELAJARAN YANG DINYATAKAN DALAM STANDARD PROGRAM SEDIA ADA	PENAMBAHBAIKAN YANG DILULUSKAN															
	<p>B. Information Technology or Information Systems</p> <ul style="list-style-type: none"> i. obtain, analyse and document user requirements for real-world projects; ii. develop appropriate IT solutions in relevant areas; iii. design and manage computer networks or information system; iv. provide technical support, configure, deploy and maintain computer solutions; and v. interpret information and system models for an organisation's functional areas. 	<p>B. Information Technology or Information Systems</p> <table border="1" data-bbox="1043 331 2029 571"> <tr> <td data-bbox="1043 331 1693 400">i. apply knowledge relating to Information Technology or Information Systems;</td> <td data-bbox="1693 331 2029 400">1. Knowledge & Understanding</td> </tr> <tr> <td data-bbox="1043 400 1693 469">ii. solve problems and develop appropriate IT or IS solutions; and</td> <td data-bbox="1693 400 2029 469">2. Cognitive Skills</td> </tr> <tr> <td data-bbox="1043 469 1693 571">iii. use industry relevant methods and tools to provide technical support, configure, deploy and maintain IT or IS solutions.</td> <td data-bbox="1693 469 2029 571">3. Practical Skills</td> </tr> </table>		i. apply knowledge relating to Information Technology or Information Systems;	1. Knowledge & Understanding	ii. solve problems and develop appropriate IT or IS solutions; and	2. Cognitive Skills	iii. use industry relevant methods and tools to provide technical support, configure, deploy and maintain IT or IS solutions.	3. Practical Skills								
i. apply knowledge relating to Information Technology or Information Systems;	1. Knowledge & Understanding																
ii. solve problems and develop appropriate IT or IS solutions; and	2. Cognitive Skills																
iii. use industry relevant methods and tools to provide technical support, configure, deploy and maintain IT or IS solutions.	3. Practical Skills																
<p>Bachelor's Degree (Level 6, MQF)</p>	<p>Upon completion of the programme, graduates should be able to:</p> <ul style="list-style-type: none"> i. communicate effectively with peers, clients, superiors and society at large; ii. utilise relevant techniques and demonstrate analytical and critical thinking skills in problem solving; iii. demonstrate teamwork, leadership, interpersonal and social skills; iv. apply skills and principles of lifelong learning in academic and career development; v. apply broad business and real world perspectives daily and demonstrate entrepreneurial skills; and 	<table border="1" data-bbox="1043 839 2029 1391"> <thead> <tr> <th data-bbox="1043 839 1693 879">LO</th> <th data-bbox="1693 839 2029 879">MQF Domain</th> </tr> </thead> <tbody> <tr> <td data-bbox="1043 879 1693 948">Upon completion of the programme, graduates should be able to:</td> <td data-bbox="1693 879 2029 948"></td> </tr> <tr> <td data-bbox="1043 948 1693 1050">i. communicate and interact effectively with diverse stakeholders;</td> <td data-bbox="1693 948 2029 1050">4. Interpersonal Skills 5. Communication Skills</td> </tr> <tr> <td data-bbox="1043 1050 1693 1118">ii. utilise digital and numeracy skills for problem solving in the field of study;</td> <td data-bbox="1693 1050 2029 1118">6. Digital Skills 7. Numeracy Skills</td> </tr> <tr> <td data-bbox="1043 1118 1693 1220">iii. demonstrate leadership, teamwork, accountability and responsibility in delivering services related to field of study;</td> <td data-bbox="1693 1118 2029 1220">8. Leadership, Autonomy & Responsibility</td> </tr> <tr> <td data-bbox="1043 1220 1693 1289">iv. commit to principles of lifelong learning in academic and career progression;</td> <td data-bbox="1693 1220 2029 1289">9. Personal Skills</td> </tr> <tr> <td data-bbox="1043 1289 1693 1391">v. apply entrepreneurial mind set in delivering solutions under changing industry landscape; and</td> <td data-bbox="1693 1289 2029 1391">10. Entrepreneurial Skills</td> </tr> </tbody> </table>		LO	MQF Domain	Upon completion of the programme, graduates should be able to:		i. communicate and interact effectively with diverse stakeholders;	4. Interpersonal Skills 5. Communication Skills	ii. utilise digital and numeracy skills for problem solving in the field of study;	6. Digital Skills 7. Numeracy Skills	iii. demonstrate leadership, teamwork, accountability and responsibility in delivering services related to field of study;	8. Leadership, Autonomy & Responsibility	iv. commit to principles of lifelong learning in academic and career progression;	9. Personal Skills	v. apply entrepreneurial mind set in delivering solutions under changing industry landscape; and	10. Entrepreneurial Skills
LO	MQF Domain																
Upon completion of the programme, graduates should be able to:																	
i. communicate and interact effectively with diverse stakeholders;	4. Interpersonal Skills 5. Communication Skills																
ii. utilise digital and numeracy skills for problem solving in the field of study;	6. Digital Skills 7. Numeracy Skills																
iii. demonstrate leadership, teamwork, accountability and responsibility in delivering services related to field of study;	8. Leadership, Autonomy & Responsibility																
iv. commit to principles of lifelong learning in academic and career progression;	9. Personal Skills																
v. apply entrepreneurial mind set in delivering solutions under changing industry landscape; and	10. Entrepreneurial Skills																

TAHAP	HASIL PEMBELAJARAN YANG DINYATAKAN DALAM STANDARD PROGRAM SEDIA ADA	PENAMBAHBAIKAN YANG DILULUSKAN	
	<p>vi. <i>demonstrate professionalism and social and ethical consideration in accordance with ethical and legal principles.</i></p> <p>A. Computer Science</p> <p>i. <i>demonstrate knowledge of essential facts, concepts, principles, and theories relating to Computer Science;</i></p> <p>ii. <i>analyze algorithms as well as design and optimize computational solutions; and</i></p> <p>iii. <i>apply computing skills in analyzing, modelling, designing, developing, programming and evaluating efficient computing solutions.</i></p> <p>B. Software Engineering</p> <p>i. <i>demonstrate knowledge of essential facts, concepts, principles, and theories relating to Software Engineering;</i></p> <p>ii. <i>apply theoretical principles of Software Engineering in relevant areas; and</i></p> <p>iii. <i>apply appropriate methodologies, models and techniques that provide a basis for analysis, design, development, test and implementation, evaluation, maintenance and documentation of a large scale software.</i></p> <p>C. Information Technology</p> <p>i. <i>demonstrate knowledge of essential facts, concepts, principles, and theories relating to Information Technology;</i></p>	<p>vi. <i>uphold professional and ethical practices in delivering services related to the field of study.</i></p>	<p>11. <i>Ethics & Professionalism</i></p>
		<p>A. Computer Science</p>	
		<p>i. <i>analyse knowledge, facts concepts, principles, and theories relating to Computer Science;</i></p>	<p>1. <i>Knowledge & Understanding</i></p>
		<p>ii. <i>analyse algorithms and techniques to design and optimize computing solutions; and</i></p>	<p>2. <i>Cognitive Skills</i></p>
		<p>iii. <i>adapt appropriate methodologies and techniques for modelling, designing, developing and evaluating computing solutions.</i></p>	<p>3. <i>Practical Skills</i></p>
		<p>B. Software Engineering</p>	
		<p>i. <i>analyse knowledge, facts concepts, principles, and theories relating to Software Engineering;</i></p>	<p>1. <i>Knowledge & Understanding</i></p>
		<p>ii. <i>analyse theoretical principles of Software Engineering in software development; and</i></p>	<p>2. <i>Cognitive Skills</i></p>
		<p>iii. <i>adapt appropriate methodologies and techniques for analysing, modelling, designing, testing and maintaining large scale software.</i></p>	<p>3. <i>Practical Skills</i></p>
		<p>C. Information Technology</p>	
		<p>i. <i>analyse knowledge, facts concepts, principles, and theories relating to Information Technology;</i></p>	<p>1. <i>Knowledge & Understanding</i></p>
		<p>ii. <i>analyse theoretical principles on Information Technology in managing Information Technology resources; and</i></p>	<p>2. <i>Cognitive Skills</i></p>

TAHAP	HASIL PEMBELAJARAN YANG DINYATAKAN DALAM STANDARD PROGRAM SEDIA ADA	PENAMBAHBAIKAN YANG DILULUSKAN											
	<p>ii. apply theoretical principles of Information Technology in relevant areas; and</p> <p>iii. design, implement and manage Information Technology solutions and resources, and recognise the impact of technology on individuals, organisation and society.</p> <p>D. Information Systems</p> <p>i. demonstrate knowledge of essential facts, concepts, principles, and theories relating to Information Systems;</p> <p>ii. demonstrate understanding of business requirement;</p> <p>iii. apply theoretical principles of Information Systems in relevant areas; and</p> <p>iv. be able to plan, design and manage business Information Systems, with the relevant technology and knowledge to enhance organisational performance.</p>	<p>iii. adapt appropriate methodologies and techniques for proposing, designing, implementing and managing Information Technology solutions.</p>	<p>3. Practical Skills</p>										
		<p>D. Information Systems</p> <p>i. analyse knowledge, facts concepts, principles, and theories relating to Information System;</p>	<p>1. Knowledge & Understanding</p>										
		<p>ii. analyse theoretical principles on Information Systems in providing business solutions; and</p>	<p>2. Cognitive Skills</p>										
		<p>iii. adapt appropriate methodologies and techniques for planning, designing, developing and managing business information system to enhance organisational performance.</p>	<p>3. Practical Skills</p>										
<p>Master's Degree (Level 7, MQF)</p>	<p>Upon completion of the programme, graduates should be able to:</p> <p>i. apply and integrate knowledge concerning current research issues in computing and produce work that is at the forefront of developments in the domain of the programme of study;</p> <p>ii. develop computing solutions and use necessary tools to analyse their performance;</p>	<table border="1"> <thead> <tr> <th data-bbox="1043 1011 1682 1046">LO</th> <th data-bbox="1682 1011 2033 1046">MQF Domain</th> </tr> </thead> <tbody> <tr> <td data-bbox="1043 1046 1682 1118"> <p>Upon completion of the programme, graduates should be able to:</p> </td> <td data-bbox="1682 1046 2033 1118"></td> </tr> <tr> <td data-bbox="1043 1118 1682 1190"> <p>i. integrate advanced knowledge related to current research issues in computing;</p> </td> <td data-bbox="1682 1118 2033 1190"> <p>1. Knowledge & Understanding</p> </td> </tr> <tr> <td data-bbox="1043 1190 1682 1286"> <p>ii. recommend innovative solutions that is at the forefront of developments in the fields of study;</p> </td> <td data-bbox="1682 1190 2033 1286"> <p>2. Cognitive Skills</p> </td> </tr> <tr> <td data-bbox="1043 1286 1682 1390"> <p>iii. evaluate computing solutions and tools in terms of their usability, efficiency and effectiveness;</p> </td> <td data-bbox="1682 1286 2033 1390"> <p>2. Cognitive Skills 3. Practical Skills</p> </td> </tr> </tbody> </table>	LO	MQF Domain	<p>Upon completion of the programme, graduates should be able to:</p>		<p>i. integrate advanced knowledge related to current research issues in computing;</p>	<p>1. Knowledge & Understanding</p>	<p>ii. recommend innovative solutions that is at the forefront of developments in the fields of study;</p>	<p>2. Cognitive Skills</p>	<p>iii. evaluate computing solutions and tools in terms of their usability, efficiency and effectiveness;</p>	<p>2. Cognitive Skills 3. Practical Skills</p>	
LO	MQF Domain												
<p>Upon completion of the programme, graduates should be able to:</p>													
<p>i. integrate advanced knowledge related to current research issues in computing;</p>	<p>1. Knowledge & Understanding</p>												
<p>ii. recommend innovative solutions that is at the forefront of developments in the fields of study;</p>	<p>2. Cognitive Skills</p>												
<p>iii. evaluate computing solutions and tools in terms of their usability, efficiency and effectiveness;</p>	<p>2. Cognitive Skills 3. Practical Skills</p>												

TAHAP	HASIL PEMBELAJARAN YANG DINYATAKAN DALAM STANDARD PROGRAM SEDIA ADA	PENAMBAHBAIKAN YANG DILULUSKAN											
	<ul style="list-style-type: none"> iii. evaluate and analyse computing solutions in terms of their usability, efficiency and effectiveness; iv. communicate and function effectively in a group; v. prepare, publish and present technical material to a diverse audience; and vi. apply existing techniques of research and enquiry to acquire, interpret and extend, knowledge in computing; and vii. demonstrate behaviour that is consistent with codes of professional ethics and responsibility. 	<ul style="list-style-type: none"> iv. communicate and interact effectively within a group and with diverse audience by publishing and presenting technical materials in the fields of study; 	<ul style="list-style-type: none"> 4. Interpersonal Skills 5. Communication Skills 										
		<ul style="list-style-type: none"> v. utilise digital and numerical skills to acquire, interpret and extend knowledge in computing; 	<ul style="list-style-type: none"> 6. Digital Skills 7. Numeracy Skills 										
		<ul style="list-style-type: none"> vi. demonstrate leadership, teamwork, autonomy and responsibility in delivering services related to field of study; 	<ul style="list-style-type: none"> 8. Leadership, Autonomy & Responsibility 										
		<ul style="list-style-type: none"> vii. exhibit capabilities to extend knowledge through life-long learning with entrepreneurs mind-set related to the fields of study; and 	<ul style="list-style-type: none"> 9. Personal Skills 10. Entrepreneurial Skills 										
		<ul style="list-style-type: none"> viii. uphold professional and ethical practices in conducting research and delivering services related to the field of study. 	<ul style="list-style-type: none"> 11. Ethics & Professionalism 										
<p><i>Doctoral Degree (Level 8, MQF)</i></p>	<p>Upon completion of the programme, graduates should be able to:</p> <ul style="list-style-type: none"> i. demonstrate a systematic comprehension and in-depth understanding of a discipline and mastery of skills and research methods related to the field of computing; ii. critically analyse, evaluate and synthesise new and complex ideas; iii. contribute to original research that broadens the boundary of knowledge through an in-depth thesis, which has been presented and defended according to International standards including 	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th data-bbox="1043 916 1688 954" style="text-align: center;">LO</th> <th data-bbox="1688 916 2040 954" style="text-align: center;">MQF Domain</th> </tr> </thead> <tbody> <tr> <td colspan="2" data-bbox="1043 954 2040 1023" style="text-align: center;">Upon completion of the programme, graduates should be able to:</td> </tr> <tr> <td data-bbox="1043 1023 1688 1126"> <ul style="list-style-type: none"> i. integrate knowledge through a systematic comprehension and in-depth understanding in the field of study; </td> <td data-bbox="1688 1023 2040 1126"> <ul style="list-style-type: none"> 1. Knowledge & Understanding </td> </tr> <tr> <td data-bbox="1043 1126 1688 1294"> <ul style="list-style-type: none"> ii. develop original research work that broadens the boundary of knowledge through in-depth thesis that has been presented and defended according to International standards; </td> <td data-bbox="1688 1126 2040 1294"> <ul style="list-style-type: none"> 2. Cognitive Skills </td> </tr> <tr> <td data-bbox="1043 1294 1688 1396"> <ul style="list-style-type: none"> iii. develop innovative computing solutions that stand the tests of usability, efficiency and effectiveness; </td> <td data-bbox="1688 1294 2040 1396"> <ul style="list-style-type: none"> 2. Cognitive Skills 3. Practical Skills </td> </tr> </tbody> </table>	LO	MQF Domain	Upon completion of the programme, graduates should be able to:		<ul style="list-style-type: none"> i. integrate knowledge through a systematic comprehension and in-depth understanding in the field of study; 	<ul style="list-style-type: none"> 1. Knowledge & Understanding 	<ul style="list-style-type: none"> ii. develop original research work that broadens the boundary of knowledge through in-depth thesis that has been presented and defended according to International standards; 	<ul style="list-style-type: none"> 2. Cognitive Skills 	<ul style="list-style-type: none"> iii. develop innovative computing solutions that stand the tests of usability, efficiency and effectiveness; 	<ul style="list-style-type: none"> 2. Cognitive Skills 3. Practical Skills 	
LO	MQF Domain												
Upon completion of the programme, graduates should be able to:													
<ul style="list-style-type: none"> i. integrate knowledge through a systematic comprehension and in-depth understanding in the field of study; 	<ul style="list-style-type: none"> 1. Knowledge & Understanding 												
<ul style="list-style-type: none"> ii. develop original research work that broadens the boundary of knowledge through in-depth thesis that has been presented and defended according to International standards; 	<ul style="list-style-type: none"> 2. Cognitive Skills 												
<ul style="list-style-type: none"> iii. develop innovative computing solutions that stand the tests of usability, efficiency and effectiveness; 	<ul style="list-style-type: none"> 2. Cognitive Skills 3. Practical Skills 												

TAHAP	HASIL PEMBELAJARAN YANG DINYATAKAN DALAM STANDARD PROGRAM SEDIA ADA	PENAMBAHBAIKAN YANG DILULUSKAN	
	<p><i>writing in Internationally refereed publications;</i></p> <p>iv. <i>show scholarly capabilities to generate, design, implement and adopt the integral part of the research process based on the computing theoretical framework;</i></p> <p>v. <i>communicate to peers, scholarly communities and society at large through the preparation, publication and presentation of technical material;</i></p> <p>vi. <i>promote the technological, social and cultural progress in a knowledge-based society in both academic and professional contexts;</i></p> <p>vii. <i>supervise research projects; and</i></p> <p>viii. <i>demonstrate behaviour that is consistent with codes of professional ethics, legal requirements and responsibility.</i></p>	<p>iv. <i>communicate and interact effectively with peers, scholarly communities and society at large through publishing and presenting technical materials;</i></p>	<p>4. <i>Interpersonal Skills</i> 5. <i>Communication Skills</i></p>
		<p>v. <i>select appropriate numerical techniques and research methodologies to acquire, interpret and extend, knowledge in computing;</i></p>	<p>6. <i>Digital Skills</i> 7. <i>Numeracy Skills</i></p>
		<p>vi. <i>demonstrate leadership, teamwork, autonomy and responsibility in conducting research based on computing theoretical framework;</i></p>	<p>8. <i>Leadership, Autonomy & Responsibility</i> 9. <i>Personal Skills</i></p>
		<p>vii. <i>exhibit capabilities to extend knowledge through life-long learning with entrepreneurs mind-set related to the fields of study; and</i></p>	<p>10. <i>Entrepreneurial Skills</i></p>
		<p>viii. <i>uphold professional and ethical practices in conducting research and delivering services related to the field of study.</i></p>	<p>11. <i>Ethics & Professionalism</i></p>