

KSBs	TM111	TM111 related LOs	Where in TM111 study calendar	TM112 related LOs	Where in TM112 study calendar	TM129 related LOs	Where in TM129 study calendar	M250 related LOs	Where in M250 study calendar	M269 related LOs	Where in M269 study calendar	TM254 related LOs	Where in TM254 study calendar	TT284 related LOs	Where in TT284 study calendar
K1: all stages of the software development life cycle (what each stage contains, including the inputs and outputs)	yes, assessed			KU1, CS1	Block 1 Parts 2 and 4, Block 2 Parts 2, 4 and 5, Block 3 Part 2, TMA 01, 02 and 03							PPS3	Block 2 Part 3	KU1, KU7, CS1, PPS3	Block 1 Block 4
K2: roles and responsibilities within the software development lifecycle (who is responsible for what)	yes, assessed											PPS3	Block 2 Part 3	PPS3	Block 1 and Block 4
K3: the roles and responsibilities of the project life cycle within your organisation and your role	no, this cannot be achieved via classroom learning, but will require some form of internship or														
K4: how best to communicate using the different communication methods and how to adapt appropriately to different audiences	yes, assessed	KS2	Block 1 Pt 4.5.3, TMA01 Q4a, Q5a	KS1	Block 2 Part 1, TMA 02, TMA 03									KU1, KU2, KU4, KS2	Block 1 and all assessments (report writing)
K5: the similarities and differences between different software development methodologies, such as agile and waterfall.	no, we do not address this in our current curriculum at levels 4 and 5 (we address it at level 6)														
K6: how teams work effectively to produce software and how to contribute appropriately	yes, assessed							KU1, 2; PS2	Week 2, 5, 6						
K7: software design approaches and patterns, to identify reusable solutions to commonly occurring problems	yes, assessed	CS2	Block 2 Pts2-5, TMA02	KU1, CS1	Block 1 Part 4, Block 2 Parts 2, 4 and 5, Block 3 Part 2, TMA 01, 02, 03			KU1, 2, 3; CS1, 2; PS 2	Week 9, 12-15						
K8: organisational policies and procedures relating to the tasks being undertaken, and when to follow them. For example, the storage and treatment of GDPR sensitive data.	yes, assessed			KU3	Block 3, Part 5 TMA03										
K9: principles of algorithms, logic and data structures relevant to software development, e.g. arrays, stacks, queues, etc.	yes, assessed	KU2	B2 - especially P6, assessed in TMA02 Q4, ICMA42 & ICMA43	KU1	Block 1, Block 2 Parts 2, 4 and 5, Block 3 Parts 1 and 2, TMA 01, 02, 03	KU2, PPS1	Robotics 2,3,4; Op Sys 3,4	KU 1.2; CS 1	Weeks 20-25	KU1	Weeks 2 – 20				
K10: principles and uses of relational and non-relational databases	yes, assessed	KU1, KU3	B1 Pt4, TMA01 Q3					describe the characteristics of an array object; KU 1, 2, 3				KS2, KU2, CS3, PPS3, PPS5	Block 2 Parts 2-10	CS3, CS4	Block 2 / TMA02
K11: software designs and functional/technical specifications	yes, assessed			KU1, CS1	Block 1 Parts 2 and 4, Block 2 Parts 2, 4 and 5, Block 3 Part 1 and 2, TMA 01, 02, 03										
K12: software testing frameworks and methodologies	yes, assessed			PPS1	Block 2, Part 4.			write code to access elements in an array, and use them in statements and expressions; KU 1, 2, 3; CS 2; KS 1	Weeks 3 - 28						
S1: create logical and maintainable codes	yes, assessed			KU1, CS1, PPS1	Block 1 Parts 2 and 4, Block 2 Parts 2, 4 and 5, Block 3 Part 2, TMA 01, 02 and 03									CS3, CS4	Throughout the whole module
S2: develop effective user interfaces	yes, assessed	KU1, KU3	Block 1 P16, TMA01 Q5a					use the methods of the class java.util.Arrays to manipulate array objects; KU 1, 2, 3; CS 1, 2; KS 1; PS 2	Weeks 20-28					CS1, CS3, CS4, CS5	Block 1, 2 and 3 TMA 1/2/3 and the EMA
S3: link code to data sets	yes, assessed														
S4: test code and analyse results to correct errors found using unit testing	yes, assessed			PPS1	Block 1 Part 4, Block 2 Part 4, TMA 01, 02			KU 1, 2; CS 1, 2; KS 1; PS 2	Weeks 17-18	PPS1	Weeks 2 – 20				
S5: conduct a range of test types, such as Integration, System, User Acceptance, Non-Functional, Performance and Security testing.	no, we do not address this in our current curriculum at levels 4 and 5 (we address it at level 6)														
S6: identify and create test scenarios	yes, assessed	KU2, CS2, KS1	B2 section 4 of P2, 3, 4 & 5 assessed in TMA02 Q3 & Q4, ICMA42	PPS1	Block 1 Part 4, Block 2 Part 4, TMA 01 and 02					PPS1	Weeks 2 – 20				
S7: apply structured techniques to problem solving, can debug code and can understand the structure of programmes to identify and resolve issues	yes, assessed	KU2, CS2, KS1	B2 section 4 of P2, 3, 4 & 5 assessed in TMA02 Q3 & Q4, ICMA42	CS1, PPS1	Block 1 Parts 2 and 4, Block 2 Parts 2, 4 and 5, Block 3 Part 2, TMA 01, 02 and 03	PPS1, PPS3	Robotics 2-6; Op Sys 2	KU 1, 2, 3; CS 1, 2; KS 1, 2, 3; PS 1, 2	Weeks 3-28	PPS1	Weeks 2 – 20				
S8: create simple software designs to effectively communicate understanding of the program	yes, assessed	KU2, CS2, KS2	Block 2 Pts2-5 section 4, TMA02	KU1, CS1	Block 1 Parts 2 and 4, Block 2 Parts 2, 4 and 5, Block 3 Part 2, TMA 01, 02 and 03			KU 1, 2, 3; KS 3	Weeks 11-16					CS1, CS2	Block 1
S9: create analysis artefacts, such as use cases and/or user stories	yes, assessed											KU2, KS2, PPS5	Block 2, Part 1		
S10: build, manage and deploy code into the relevant environment	no, this cannot be achieved via classroom learning, but will require some form of internship or employer training														
S11: apply an appropriate software development approach according to the relevant paradigm (for example object oriented, event driven or procedural)	yes, assessed			KU1, CS1, PPS1	Block 1 Parts 2 and 4, Block 2 Parts 2, 4 and 5, Block 3 Part 2, TMA 01, 02 and 03										
S12: follow software designs and functional/technical specifications	yes, assessed							KU 1, 2, 3; CS 2; KS 1	Weeks 3-28	KU2	Weeks 2 – 20				
S13: follow testing frameworks and methodologies	no, we do not address this in our current curriculum at levels 4 and 5 (we address it at level 6)														
S14: follow company, team or client approaches to continuous integration, version and source control	yes, assessed													KS3, PPS3	Block 4 and EMA
S15: communicate software solutions and ideas to technical and non-technical stakeholders	yes, assessed							KS 2, 3	Throughout	KU2	Weeks 2 – 20	KU2, CS2, KS2	Block 2, Part 4	KS2	Y_P (throughout the whole module)
S16: apply algorithms, logic and data structures	yes, assessed			CS1	Block 1 Parts 2 and 4, Block 2 Parts 2, 4 and 5, Block 3 Part 2, TMA 01, 02 and 03	PPS1, PPS3	Robotics 2-6	KU 1, 2, 3; CS 1, 2; KS 1; PS 1, 2	Weeks 3-28	KU1, CS1, CS2	Weeks 2 – 20				
S17: interpret and implement a given design whilst remaining compliant with security and maintainability requirements	yes, assessed											KU2, CS2, CS3, PPS1, PPS3, PPS5	Block 2, Parts 6, 9 and 10		
B1: Works independently and takes responsibility. For example, has a disciplined and responsible approach to risk, and stays motivated and committed when facing challenges	yes, partially, through our embedded employability skills development across the curriculum														
B2: Applies logical thinking. For example, uses clear and valid reasoning when making decisions related to undertaking work instructions	yes, assessed					PPS2, PPS3, KS3	All course	KU 1, 2, 3; KS 1; PS 2	Weeks 3-28	KU1, CS1, CS2	Weeks 2 – 20				
B3: Maintains a productive, professional and secure working environment	no, this cannot be achieved via classroom learning, but will require some form of internship or														
B4: Works collaboratively with a wide range of people in different roles, internally and externally, with a positive attitude to inclusion & diversity	yes, partially, through our embedded employability skills development across the curriculum														
B5: Acts with integrity with respect to ethical, legal and regulatory ensuring the protection of personal data, safety and security.	yes, assessed	KU3	Block 1 Pt1, Block 3 P16, ICMA41	KU3, CS2	Block 2 Part 7, Block 3 Parts 3-6, TMA 03	KU4, PPS1	Net 5.6,7; Op Sys 6; Robotics 3,4,7								
B6: Shows initiative for solving problems within their own remit, being resourceful when faced with a problem to solve.	yes, assessed					KS3, PPS3, PPS4	Portfolio, eg Robotics 5							CS1, KS3	Throughout the whole module
B7: Communicates effectively in a variety of situations to both a technical and non-technical audience.	yes, assessed	KS2	In TMA01 and TMA03 questions sk students to address specific audiences	KS1	Block 2 Part 1, TMA 02, TMA 03	CS2, KS1	All course							KS2	Throughout the whole module
B8: Shows curiosity to the business context in which the solution will be used, displaying an inquisitive approach to solving the problem. This includes the curiosity to explore new opportunities, and techniques; the tenacity to improve methods and maximise performance of the solution; and creativity in their approach to solutions.	yes, partially, through our embedded employability skills development across the curriculum														
B9: Demonstrates creativity and tenacity in their approach to solutions and the methods used to come to a solution for example, sees the task through to the end by devising new solutions and despite obstacles and problems along the way.	yes, assessed	KU2, CS2	Mainly in the ethos of Block 2 'creating solutions' e.g. Part 2.4												
B10: Committed to continued professional development.	yes, assessed	PPS1, PPS2	Block 1 Pt 6.6, TMA01 Q5b, TMA02 Q5, TMA03 Q4												