Philadelphia University   **Faculty of Information Technology**

Guidance Plan for the
Software Engineering Curriculum
2004 / 2005

Year	Semester	Module Number	Module Title	Prerequisite	Types of Requirements
First	First (18 Credit Hours)	110101	Arabic Skills (1)	---	(UR)
		130101	English Skills (1)	---	(UR)
		710101	Computer Skills (1)	---	(UR)
		210101	Mathematics (1)	---	(FR)
		711111	Programming Fundamentals	---	(FR)
		210104	Discrete Structures	---	(SR)
	Second (18 Credit Hours)	130102	English Skills (2)	130101	(UR)
		710102	Computer Skills (2)	710101	(UR)
		760161	Fundamentals of Information Technology	710101	(FR)
		210103	Mathematics for Computing	210101	(SR)
		721112	Object-Oriented Paradigm	711111	(DR)
		721281	Introduction to Software Engineering	711111	(DR)
Second	First (18 Credit Hours)	111101	National Education	------	(UR)
		731151	Introduction to Information Systems	710101	(SR)
		711231	Computer Organization and Architecture	210103+760161	(DR)
		721211	Object-Oriented Data Structures	721112	(DR)
		721283	Software Requirement	721281	(DR)
		760261	Database Fundamentals	(721211 or co-requisite)+210104	(DR)
	Second (18 Credit Hours)	111133	Culture and Civilization (1)	---	(UR)
		711271	Multimedia Systems	760161	(FR)
		721284	Software Design 1	721283	(DR)
		721285	Software Process and Quality	721283	(DR)
		711232	Principles of Operating Systems	711231+721211	(DR)
		750322	Design and Analysis of Algorithms	210103+721211	(DR)
Third	First (18 Credit Hours)	210231	Introduction to Probability and Statistics	------	(FR)
		721282	Professional Issues in Computing and Information Technology	721281 or 731151	(FR)
		721341	Fundamentals of Computer and Telecommunication Networks	721211	(DR)
		721384	Software Design 2	721284	(DR)
		721385	Software Construction and Evolution	721284+760261	(DR)
		750351	Fundamentals of Artificial Intelligence	210104+750322	(DR)
	Second (15 Credit Hours)	711343	Concurrent and Distributed Programming	711232	(DR)
		721386	Software Verification and Validation	721385	(DR)
		721398	Practical Training	721384 + Dept. Agmt.	(DR)
		750321	Concepts of Programming Languages	210104+721211	(DR)
		750472	Computer Modelling and Simulation	210231+721211	(DR)
Fourth	First (15 Credit Hours)	711272	WWW: Concepts and Programming	721112 or 731211	(FR)
		721471	Multimedia Software Engineering	721384+711271+ 711272	(DR) (DR)
		721487	Formal Methods in Software Engineering	210104+721386	(DR)
		721488	Software Management	721386	(DR)
		----------	Department Elective (1)	----------	(DR)
	Second (12 Credit Hours)	111100	Military Sciences	--------	(UR)
		---------	University Elective	--------	(UR)
		721499	Graduation Project	721398 +Dept. Agmt.	(DR)
		-------	Department Elective (2)	--------	(DR)

(UR) University Req.   (FR) Faculty Req.   (DR) Dept. Req.   (SR) Supporting Req.