



**COMPUTER ENGINEERING PhD Program (on BSc)**

<b>REMEDIAL COURSES</b>				
<b>Dept.</b>	<b>Code</b>	<b>Course Name</b>	<b>CR.</b>	<b>ECTS</b>
CSE	211	Data Structures	NC	
CSE	221	Principles of Logic Design	NC	
CSE	224	Introduction to Digital Systems	NC	
CSE	232	Systems Programming	NC	
CSE	354	Automata Theory and Formal Languages	NC	
MATH	154	Discrete Mathematics	NC	
<b>PROGRAM COURSES</b>				
<b>Dept.</b>	<b>Code</b>	<b>Course Name</b>	<b>CR.</b>	<b>ECTS</b>
		Area Elective I	3	10
CSE	6xx	Departmental Elective I	3	10
CSE	5/6xx	Departmental Elective II	3	10
CSE	5/6xx	Departmental Elective III	3	10
CSE	5/6xx	Departmental Elective IV	3	10
CSE	5/6xx	Departmental Elective V	3	10
CSE	5/6xx	Departmental Elective VI	3	10
CSE	5/6xx	Departmental Elective VII	3	10
CSE	5/6xx	Departmental Elective VIII	3	10
	6xx	Free Elective I	3	10
		Free Elective II	3	10
		Free Elective III	3	10
		Free Elective IV	3	10
		Free Elective V	3	10
CSE	590	Research Seminar	NC	2
CSE	691	Independent Study for Qualifying Exam	NC	30
CSE	700	PhD Dissertation	NC	150
		TOTAL	42	322
<b>EXTRA/NON-DEGREE COURSES</b>				
<b>Dept.</b>	<b>Code</b>	<b>Course Name</b>	<b>CR.</b>	<b>ECTS</b>
		Extra/Non-degree	NC	

<b>Course Group</b>	<b>Description</b>
Area Elective I	PHYS 514, ESYE 501, BTEC 550.
Departmental Elective I	CSE 6XX, Computer Engineering courses under the GSNAS.
Departmental Elective II-VIII	Computer Engineering courses under the GSNAS.
Free Elective I	6XX, by approval of advisor and CSE department.
Free Elective II-V	Unrestricted, by approval of advisor and CSE department.
Extra/Non-degree	Optional non-credit (NC) courses that are not part of the program.
Remedial Courses	Undergraduate level courses offered by department.