

V5.1 Software Engineering Degree program (SEDP)—New, changed, and existing courses

	1A	1B	2A	2B	3A	3B	4A	4B
1	SE1 Intro to OO & SE CSC110 CSC	SE2 OO Design&Methods CSC160 CSC	SE3 Architecture&Methods SENG221 (new) SENG	SE4 Systems Programming SENG265 SENG	SE5 Requirements&Specific Software evolution SENG321 (new) SENG	SE6 Software evolution SENG371 (new) SENG	SE7 Embedded systems SENG421 (new) SENG	SE8 SWQuality Engineering SENG471 (new) SENG
2	MECHSYS Mechanical systems MECH141 MECH	ELECSYS Electrical systems ELEC199 ELEC	CAS CompArch&Assem CSC230 CSC	ALG1 Algos & data structs CSC 225 CSC	DD Digital Design CSC355 CSC/CENG/ELEC	AFL Foundations CSC 320 CSC	Elective	CAPB Design Project SENG499 (new) SENG
3	LA Linear algebra MATH133 MATH	WE Web engineering SENG130 (new) SENG	PS Probability/Statistics STAT 260 MATH	HCI Human-comp interact SENG310 SENG	OSDC Operating systems CSC360 CSC	DB Databases CSC370 CSC	NET Networks CSC450/CENG460 CSC/CENG/ELEC	RT Real-time systems CENG455/CSC460 CSC/CENG
4	CALC1 Calculus 1 MATH100 MATH	CALC2 Calculus 2 MATH101 MATH	SYSDDYN System Dynamics ELEC255 (new) CENG/ELEC	SAS Signals and Systems ELEC265 (new) CENG/ELEC	CTRL Control Systems ELEC361 (new) CENG/ELEC	SEC Security Engineering SENG372 (new) SENG	Elective	Elective
5	PHY Basic Science Phys126 (new) SCIENCE	CHE Basic Science CHEM150 SCIENCE	DS1 Discrete math&logic MATH122 MATH	DS2 Discrete math&logic MATH222 MATH	BSC5 Basic Science BIOC102 SCIENCE	BSC6 Basic Science EOS110 SCIENCE	Elective	Elective
6		ENGL English ENGL115 ENGL	TECHWRT Technical writing ENGR240 ENGR	BUS1 Economics & Entreprnt ENGR281 (new) BUS	BUS2 Digital & Management COM241 (new) BUS	CST5 Elective MISC	FE Free Elective Any faculty MISC	SOCIAL Social&prof issues SENG401 (new) SENG

Legend	
New	22
Changed	7
Unchanged	46
Total	76

Required	Elective
Black type	Blue type
For more details, click here	
Refer to prerequisites sheet	

- SE** Software Engineering
- CST** Complementary Studies (7 needed)
- BSC** Basic Science (6 needed)
- DS** Discrete Structures & Logic
- ALG** Algorithms
- AFL** Automata and Formal Languages
- CTRL** Automatic Control Engineering
- SOCIAL** Social and Professional Issues
- SAS** Signal analysis & systems
- CAS** Computer architecture & assembler
- DD** Digital design
- LA** Linear algebra
- WE** Web engineering
- MECHSYS** Mechanical systems
- ELECSYS** Electrical systems
- BUS** Business
- DB** Data bases
- OSNET** Operating systems & networks
- PS** Probability and statistics
- HCI** Human-computer interaction
- CALC** Calculus
- CAP** Capstone project

Engineering

Electives						
CAPA Design Project SENG499 (new) SENG	ARCH Software architecture SENG422 SENG	CBSE Software components SENG454 (new) SENG	FTC Fault-tolerant computin CSC454 CSC	CC Compiler constructions CSC435 CSC	SP Software Process SENG472 SENG	TOP Topics in SE SENG480 SENG
ALG2 Algos Analysis CSC 326 CSC	ALG3 Analysis of Algos CSC425 CSC	CG Computer Graphics CSC405 CSC	MMS Multimedia systems SENG410/CSC461/EL CSC/CENG	PL Prog. Languages CSC330 CSC	AOOD Advanced OO Design SENG430 SENG	TOP Topics in CSC CSC485 CSC
IKM Info&knowldg mgmt SENG315 (new) SENG	NC Netcentric-computing SENG450 SENG	CON Concurrency CSC464 (new) CSC	DC Distributed computing SENG462/CSC462 SENG	CSCW Collaborative work SENG435 (new) SENG	MSD Management of SD SENG470 SENG	TOP Topics in CENG CENG496 CENG
DSP Digital Signal Processin ELEC310 CENG/ELEC	COM Communications ELEC350 CENG/ELEC	WMC Wireless&Mobile Com ELEC441 (new) CENG/ELEC	AI Artificial Intelligence CENG420 CENG/ELEC	PATREC Pattern Recognition ELEC485 CENG/ELEC	MIN Data mining SENG474 (new) SENG	TOP Topics in ELEC ECE496 ELEC
NA Numerical analysis CSC349A/CSC340 CSC	ORLP OR & Lin. Programmin CSC448A CSC	ORSIM OR & Simulation CSC448B CSC	CSA Systems&Architecture CENG450 CENG	MICRO Microprocessor System CENG355 CENG	ERGO Ergonomics SENG412 SENG	ROBOT Robotics ELEC426/MECH430 MECH/ECE

- Existing SENG courses to be deleted**
- SENG424** Reliability (absorbed into security)
- SENG Courses absorbed into SE3-8**
- SENG265** Introduction to SE
 - SENG330** OO Software Development
 - SENG365** Software Development I
 - SENG420** Software Evolution
 - SENG440** Embedded Systems
 - SENG465** Advanced Software Development