## **Software and Data Engineering Technology (SDET) Program (120 credits)**

Technology   CS 106 (GER)   Roadmap to Computing Engineers   Security   Computer Science   CS 115	Freshman (30 credits	s)	8			
Roadmap to Computing Engineers   Series   Seri	SDET 101 OR	Fundamentals of Software and Data	3	SDET 102	Applications of Software Engineering	3
English Comp: Writing, Thinking, Speaking	CS 106 (GER)	Technologies OR			Technology	
Speaking						
Freshman Seminar	ENGL 101 (GER)		3	Scientific Literacy (	GER with Lab	4
C++3						
MET 103	Freshman Seminar	Freshman Seminar	0	CS 115	C++ 3	3
Total:	MATH 138 (GER)	General Calculus I	3	ENGL 102 (GER)		3
Total:	MET 103	Engrg Graphics & Intro to CAD	2	MATH 105	Elementary Probability and Statistics	3
Sophomore (33 credits)	ET 101	Intro. to Engineering Tech.	0			
Sophomore (33 credits)						
Section   Introduction to Digital Electronics   3   SDET 201   Data Engineering   3   SDET 201   Introduction to Network Technology   3   SDET 201   Introduction to Network Technology   3   SDET 201   Introduction to Network Technology   3   SDET 201   Internet Applications   3   SDET 201		Total:	(14)		Total:	(16)
History and Humanities GER 200 level 3 IT 120 Introduction to Network Technology 3  TT 201 Information Design Techniques 3 IT 202 Internet Applications 3  Scientific Literacy GER Elective Technical Elective 3 Elective Free Elective 3  Elective Free Elective 3 Elective Free Elective 3  Internet Applications 3  Elective Free Elective 3  Elective Free Elective 3  Introduction to Network Technology 3  Elective Technical Elective 3  Elective Free Elective 3  Introduction to Network Technology 3  Elective Free Elective 3  Elective Free Elective 3  Elective Free Elective 3  Elective Free Elective 3  Engineering Technology 1  COM 313 Technical Writing 3 History and Humanities GER 300+ level 3  ES 331 Database Design Management and Applications 3  ECET 311 Embedded Systems 1 3 Elective Technical Elective 3  Elective Technical Elective 3  Elective Free Elective 3  ENGR 423 Drone Science Fundamentals 3 ENGR 424 Robotics Science Fundamentals 3  ENGR 423 Drone Science Fundamentals 3  ENGR 424 Robotics Science Fundamentals 3  ENGR 423 Software Web Applications for Bengineering Technology II  Humanities and Social Science Senior Seminar GER  Elective Technical Elective 3  Elective Technology II 3  Elective Technology II 3	Sophomore (33 credi	ts)				
Tr 201	ECET 215	Introduction to Digital Electronics	3	SDET 201	Data Engineering	3
Tr 201	History and Humanities	GER 200 level	3	IT 120	Introduction to Network Technology	3
Elective   Technical Elective   3	IT 201		3	IT 202	Internet Applications	3
Free Elective	Scientific Literacy GER		3	Elective	Technical Elective	3
Total:	Elective	Technical Elective	3	Elective	Free Elective	3
Software Web Applications for Engineering Technology I 3   CPT 335   Networks Applications for Computer Technology I 3   CPT 335   Networks Applications for Computer Technology I 3   Networks Applications for Computer Technology I 3   Networks Applications for Computer Technology I 3   Networks Applications of Computer Technology I 3   Networks Applications of Computer Technology I 3   Networks Applications I I I I I I I I I I I I I I I I I I I	Elective	Free Elective				
Software Web Applications for Engineering Technology I   Software Web Applications   Software Web Applications for Elective   Software Web Applications for Engineering Technology I   Software Web Applications for Engineering Technology II   Software Social Science Senior Seminar GER   Software Web Applications for Elective   Software Seminar GER   Software Seminar GER   Software Seminar GER   Software Web Applications for Engineering Technology II   Software Seminar GER   Software Seminar GER   Software Seminar GER   Software Web Applications for Engineering Technology II   Software Seminar GER   Soft		Total:	(18)		Total:	(15)
Engineering Technology I 3  COM 313 Technical Writing 3 History and Humanities GER 300+ level 3 ES 331 Database Design Management and Applications 3 ECET 311 Embedded Systems I 3 Elective Technical Elective 3 Elective Free Elective Free Elective Free Elective Free Elective Total: (18) Total:  Senior (24 credits) ENGR 423 Drone Science Fundamentals CPT 430 Software Web Applications for Engineering Technology II  Humanities and Social Science Senior Seminar GER Elective Technical Elective 3 Elective Technical Elective 3 ENGR 424 Robotics Science Fundamentals CPT 435 Networks Applications for Computer Technology II 3 Elective Technical Elective						
COM 313   Technical Writing   3   History and Humanities GER 300+ level   3	CPT 330		3	CPT 335		3
Database Design Management and Applications 3   ECET 411   Embedded Systems II   3   ECET 311   Embedded Systems I   3   Elective   Technical Elective   3   Elective   Technical Elective   3   Elective   Technical Elective   3   Elective   Total:   (18)   Total:   (15)			Ţ			
Applications 3  ECET 311 Embedded Systems I 3 Elective Technical Elective Technical Elective 3 Elective Free Elective Free Elective Total: Total:  Total:  Total:  ENGR 423 Drone Science Fundamentals CPT 430 Software Web Applications for Engineering Technology II  Humanities and Social Science Senior Seminar GER  Elective Technical Elective				ž – – – – – – – – – – – – – – – – – – –		
Elective Technical Elective 3 Elective Technical Elective 3 Elective Technical Elective 3 Elective Free Elective 3 Elective Free Elective 3 Elective Free Elective 3 Elective Free Elective 5 Total: (18) Total: (15) Enior (24 credits)  ENGR 423 Drone Science Fundamentals 3 ENGR 424 Robotics Science Fundamentals 3 CPT 430 Software Web Applications for Engineering Technology II Senior Project 3 Elective Technical Elective 3 Elective Technical Elective 3 Elective Technical Elective 3 Elective Technical Elective 3	IS 331		3	ECET 411	Embedded Systems II	3
Elective Free Elective 3	ECET 311	Embedded Systems I	3	Elective	Technical Elective	3
Total:	Elective	Technical Elective	3	Elective	Free Elective	3
Senior (24 credits)	Elective	Free Elective	3			
ENGR 423 Drone Science Fundamentals 3 ENGR 424 Robotics Science Fundamentals 3 Software Web Applications for Engineering Technology II Senior Project 3 Senior		Total:	(18)		Total:	(15)
CPT 430 Software Web Applications for Engineering Technology II  Humanities and Social Science Senior Seminar GER  3 CPT 401 Senior Project  Networks Applications for Computer Technology II 3  Elective Technical Elective 3 Elective Technical Elective 3	Senior (24 credits)			•	•	
Engineering Technology II  Humanities and Social Science Senior Seminar GER  Senior Project  Networks Applications for Computer Technology II 3  Elective  Technical Elective  3 Elective  Technical Elective  3 Elective  Technical Elective  3	ENGR 423	Drone Science Fundamentals	3	ENGR 424	Robotics Science Fundamentals	3
Humanities and Social Science Senior Seminar GER  3 CPT 435  Networks Applications for Computer Technology II 3  Elective Technical Elective 3  Elective Technical Elective 3	CPT 430		3	CPT 401	Sanjor Project	3
Humanities and Social Science Senior Seminar GER    CP1 435   Technology II 3		Engineering Technology II		Cr 1 401	•	
	Humanities and Social Science Senior Seminar GER		3	CPT 435		3
Total: (12) Total: (12)	Elective			Elective		
		Total:	(12)		Total:	(12)

## **Approved Technical Electives:**

CODE	TITLE	CREDITS
CPT 310	Computer Design Fundamentals for Computer Technology	3
CPT 315	Computer Architecture for Computer Technology	3
CPT 325	Medical Informatics Technology	3
CPT 373	Web App Development for Mobile	3
CPT 395	Co-op Work Experience I	3
CPT 341	Visual Basic.NET for Engineering Technology	3
CPT 425	Medical Informatics Technology II	3
CPT 440	Visual Basic Applications for Engineering Technology	3
MIT 231	Intro to Comp Security:Med Dev	3
MIT 326	Electronic Medical Record Design	3
MIT 440	Clinical Internship	3
BMET 320	Applied Biomedical Data Acquisition	3
BMET 415	Biomedical Mechatronics	3

Additional courses from other departments may be substituted as Technical Electives after obtaining prior approval from the SDET Program Coordinator.

## **Medical Informatics Specialization:**

Complete the following 4 courses:

CODE	TITLE	CREDITS
CPT 325	Medical Informatics Technology	3
CPT 425	Medical Informatics Technology II	3
CPT 440	Visual Basic Applications for Engineering Technology	3
MIT 326	Electronic Medical Record Design	3
R 120 141	Anatomy & Physiology	4

Select two of the following:

CODE	TITLE	CREDITS
IT 220	Wireless Networks	3
IT 330	Computer Forensic	3
IT 331	Privacy and Information Technology	3
IT 332	Digital Crime	3
IT 430	Ethical Hacking for System Administrators	3
CS 434	Advanced Database Systems	3
CS 608	Cryptography and Security	3
CS 639	Elec. Medical Records: Med Terminologies and Comp. Imp.	3
R120 102	General Biology II	4
R120 142	Anatomy &Physiology	4

## Co-op:

Co-op courses must be approved by the SDET Program Coordinator and Career Development Services. CPT 395 is taken as an elective for degree credit. Students taking a Full-Time Co-op may only register for a maximum of 9 credits including Co-op, but are full-time.