



PROGRAM VISION

“Achieve leadership in the field of communications and computer engineering and gain the confidence of the local and regional community in the graduate of the program”

PROGRAM MISSION

“The Communications and Computers Engineering program at Mansoura University committed to prepare scientifically and ethically qualified and professional engineers in the fields of communications and computer engineering, able to compete in the local and regional labor market and conduct scientific research to serve society and develop the environment “

PROGRAM AIMS

Upon successful completion of the program, graduates must be able to:

1. In-depth knowledge: Acquire in-depth knowledge of the requirements of mathematics, natural sciences, and basic engineering concepts to practice communication engineering or advanced computer engineering, including accurate analysis and creative design, compact and real design and smart applications.
2. Broad specialized science: Acquisition of specialized science for communications engineering, including knowledge of various contemporary engineering issues related to disciplines.
3. Professional: Use practical and managerial skills to design systems, conduct experiments, analyze data, manage projects, identify and solve engineering problems necessary for productive occupations in the public and private sectors, or to pursue higher education.
4. Professionalism: Identify communication, presentation and language skills to ensure effective communication, demonstrate professional and ethical responsibilities, and engage in lifelong self-learning so that graduates are prepared for a modern and complex work environment
5. Creativity: Providing an environment that enables students to pursue their goals in an innovative, rigorous, developed and supportive program.



Faculty of Engineering – Mansoura University



COMMUNICATIONS & COMPUTERS ENGINEERING

PROGRAM MATRIX

<http://engfac.mans.edu.eg/>

Course		Year	Aims					General Competencies (A)										Elec. Comp. (B)					Sp. C. (C)		Course			
			1	2	3	4	5	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	1	2				
BAS 011	Mathematics (1)	Level 000																								BAS 011	Mathematics (1)	
BAS 021	Mechanics (1)																										BAS 021	Mechanics (1)
BAS 031	Physics (1)																										BAS 031	Physics (1)
BAS 041	Basics of Chemical Engineering																										BAS 041	Basics of Chemical Engineering
PDE 052	Engineering Drawing																										PDE 052	Engineering Drawing
UNR 061	English Language (1)																										UNR 061	English Language (1)
BAS 012	Mathematics (2)																										BAS 012	Mathematics (2)
BAS 022	Mechanics (2)																										BAS 022	Mechanics (2)
BAS 032	Physics (2)																										BAS 032	Physics (2)
CSE 042	Introduction to Computer Systems																										CSE 042	Introduction to Computer Systems
PDE 051	Principles of Manufacturing Engineering																									PDE 051	Principles of Manufacturing Engineering	
UNR 062	English Language (2)																									UNR 062	English Language (2)	
BAS 113	Mathematics (3)	Level 100																								BAS 113	Mathematics (3)	
ENG 111	Technical Report Writing																										ENG 111	Technical Report Writing
UNR 171	History of Engineering and Technology																										UNR 171	History of Engineering and Technology
ECE 121	Electric Circuits																										ECE 121	Electric Circuits
CSE 141	Digital Logical Design 1																										CSE 141	Digital Logical Design 1
ECE 122	Solid State Electronics																										ECE 122	Solid State Electronics
BAS 114	Mathematics (4)																										BAS 114	Mathematics (4)
BAS 115	Statics and Probability Theory																										BAS 115	Statics and Probability Theory
CSE 112	Algorithms and Data Structures																										CSE 112	Algorithms and Data Structures
ECE 131	Signals and Systems																										ECE 131	Signals and Systems
ECE 123	Electronic Basics																									ECE 123	Electronic Basics	
ELE 151	Electric Power and Machines																									ELE 151	Electric Power and Machines	
BAS 215	Mathematics (5)	Level 200																								BAS 215	Mathematics (5)	
CSE 211	Digital Design 2																										CSE 211	Digital Design 2
CSE 212	Database Systems																										CSE 212	Database Systems
ECE 231	Digital Signal Processing																										ECE 231	Digital Signal Processing
UNR 241	Communication and Presentation Skills																										UNR 241	Communication and Presentation Skills
CSE 221	Control 1																										CSE 221	Control 1
CSE 213	Computer Architecture																										CSE 213	Computer Architecture
ECE 232	Analog Communication Systems																										ECE 232	Analog Communication Systems
ECE 221	Electronic Circuits																										ECE 221	Electronic Circuits
UNR 281	Law and Human Rights																										UNR 281	Law and Human Rights
CCE 271	Field Training (1)																									CCE 271	Field Training (1)	
CSE 311	Operating Systems	Level 300																								CSE 311	Operating Systems	
ECE 331	Digital Communication Systems																										ECE 331	Digital Communication Systems
CSE 313	Microprocessors																										CSE 313	Microprocessors
ECE 341	Electromagnetic Fields																										ECE 341	Electromagnetic Fields
CCE 311	Integrated Circuits																										CCE 311	Integrated Circuits
CCE 331	Optical Fiber																										CCE 331	Optical Fiber
CCE 332	Microwave Engineering																										CCE 332	Microwave Engineering
CCE 341	Distributed Systems																										CCE 341	Distributed Systems
CCE 342	Multimedia																										CCE 342	Multimedia
CCE 343	Computer System Programming																										CCE 343	Computer System Programming
CCE 344	Software Engineering																									CCE 344	Software Engineering	
CCE 345	Control (2)																									CCE 345	Control (2)	
CSE 312	Computer Networks (1)																									CSE 312	Computer Networks (1)	
ECE 342	Waveguides and Antennas																									ECE 342	Waveguides and Antennas	
CSE 315	Embedded Systems																									CSE 315	Embedded Systems	
CSE 314	Computer Drawing																									CSE 314	Computer Drawing	
CCE 371	Training 2																									CCE 371	Training 2	
CCE 481	Graduation Project (1)	Level 400																								CCE 481	Graduation Project (1)	
ECE 431	Mobile Communications																										ECE 431	Mobile Communications
CSE 411	Advanced Programming Techniques																										CSE 411	Advanced Programming Techniques
UNR 461	Ethics and Morals of the Profession																										UNR 461	Ethics and Morals of the Profession
ENG 412	Project Management																										ENG 412	Project Management
CCE 482	Graduation Project (2)																										CCE 482	Graduation Project (2)
CSE 421	Programmable Logic Control																										CSE 421	Programmable Logic Control
CSE 422	Artificial Intelligence																										CSE 422	Artificial Intelligence
UNR 471	Marketing																										UNR 471	Marketing
CCE 411	Industrial Electronics																										CCE 411	Industrial Electronics
CCE 412	Introduction to Nanotechnology																									CCE 412	Introduction to Nanotechnology	
CCE 421	Information Theory																									CCE 421	Information Theory	
CCE 422	Selected Topics in Communications Engineering																									CCE 422	Selected Topics in Communications Engineering	
CCE 423	Satellite Communications																									CCE 423	Satellite Communications	
CCE 424	Communication Security																									CCE 424	Communication Security	
CCE 425	Adaptive Filters																									CCE 425	Adaptive Filters	
CCE 426	Phonics																									CCE 426	Phonics	
CCE 427	Wireless Communications																									CCE 427	Wireless Communications	
CCE 441	Computer Networks (2)																									CCE 441	Computer Networks (2)	
CCE 442	Design and Programming of Web server																									CCE 442	Design and Programming of Web server	
CCE 443	Big Data Analytics																									CCE 443	Big Data Analytics	
CCE 444	Selected Topics in Computers Engineering																									CCE 444	Selected Topics in Computers Engineering	
CCE																												