Newark College of Engineering – Programs and Advisor Outline

Please use the chart below as a brief outline of the various programs offered by the Newark College of Engineering. You will also find the contact information for each of the programs should you have any questions.

Note: all phone numbers at NJIT begin with "973-596" followed by the extension (i.e. for Penelope Georges whose extension is listed as "X5379", the phone number is 973-596-5379).

Biomedical Engineering (BS)		Advisor
Bioinstrumentation - **BME**	Use of bioelectric instruments to record data/signals/transmission from different parts of the body and brain. Pacemakers, blood pressure monitors, hearing aids, body scanners, etc	*Freshmen-Sophomore:* Penelope Georges X5379 pgeorges@njit.edu Fenster 527 *Junior-Senior:* Alev Erdi X3556 alev.k.erdi@njit.edu Fenster 608
Biomechanics - **BME**	Studies the structure and function of biological systems.	
Biomaterials & Tissue Engineering - **BME**	The study of biological matter and constructs. Joint replacement, dental implants, heart valves, contact lenses, breast implants, nerve conduits, etc.	

Chemical Engineering (BS)		Advisor
Chemical Engineering - **CHE**	Study, research and engineer materials and products essential to society (i.e. medicine, waste management, environmental safety materials, etc).	Gordana Obuskovic X5451 Gordana.obuskovic@njit.edu Tiernan 150

Civil Engineering (BS)		Advisor
Civil Engineering - **CE**	Civil engineers help build pipelines, reservoirs, tunnels, dams, etc. The main fields of study include Structure/Foundation, Transportation & Environmental and Water Resources Engineering.	Thomas Jaworski X3665 Tjj5@njit.edu Colton Hall 205
Minor in Environmental Engineering	*speak with Dept Advisor	

Computer Engineering (BS)		Advisor
Computer Engineering - **COE**	Study of operating systems, software engineering, computer architecture, computer networking, advanced computer architecture or telecommunications.	Ryoko Mathes X5457 mathes@njit.edu ECEC 235

Electrical Engineering (BS)		Advisor
Electrical Engineering - **EE**	5 Concentrations: *Computer systems* – study of comp. systems organization and system design. *Controls* – study of feedback mechanisms for controlling things ranging from space/aircraft to emissions to AC systems. *Power Systems* – study of electric power and energy systems *Telecommunications & Networking* – study and analysis of design for wireless and wired systems of information delivery *Electronic, Microwave & Phonetic Devices* – study of modeling and designing tools for electronic devices, circuits, etc.	Ryoko Mathes X3510 mathes@njit.edu ECEC 235

Engineering Science (BS)		Advisor
Engineering Science - **ESC**	Provides a general engineering education and allows students to explore various majors and concentration areas within the Newark College of Engineering. Students work closely with academic advisor to map out course curriculum.	Ryan Baldwin X5373 Ryan.D.Baldwin@njit.edu Fenster Hall 260

Industrial Engineering (BS)		Advisor
Industrial Engineering - **IE**	The industrial engineering curriculum prepares engineers to design, improve, install, and operate the integrated systems of people, materials, and facilities needed by industry, commerce, and society. Industrial engineers solve problems which arise in the management of systems by applying the principles of engineering science, product and process design, work analysis, human factors principles, and operations research. Specializations: Operations Engineering, Manufacturing Engineering and Process Engineering.	Lucie Tchouassi X3660 Lucie.Thibeaud@njit.edu Mec Center 208

Mechanical Engineering (BS)		Advisor
Mechanical Engineering - **ME**	Mechanical engineering study's the design, development, manufacturing, and operation of energy conversion and machine systems. Careers/fields of study include – Aerospace, Biomedical, CAD/CAM systems, Energy, HVAC, Mechanical Design, Materials, Plastics Processing, Robotics, Systems manufacturing.	Lucie Tchouassi X3660 Lucie.Thibeaud@njit.edu Mec Center 208

Engineering Technology (BSET)		Advisor
Computer Technology – **CPT** **BSET Degree**	Prepares students for careers in Computer application Programmer, Medical Records Specialist, Computer Security, Database Administrator, Computer Systems Management, Customer Support Engineer, etc	David Lubliner X2878 lubliner@njit.edu GITC 2509
Concrete Industry Management – **CIM** **BS Degree**	Studying the field of Concrete, management and technology. Graduates of this program acquire a minor in business administration. Transfers – typically enter as AAS/Civil or Construction ET	Mohamed Mahgoub X6081 mahgoub@njit.edu GITC 2507
Construction Engineering Technology – **CET** **BSET Degree**	ABET accredited. PE Exam ready. Study of business, management, communication, etc in a construction engineering perspective. Careers – contractors, construction management, project executives, project managers, construction inspectors.	John Wiggins X8193 wiggins@njit.edu GITC 2107
Construction Management Technology – **CMT** **BSET Degree**	Not eligible for PE Exam. Study of business, management, communication, etc in a construction engineering perspective. Careers – contractors, construction management, project executives, project managers, construction inspectors.	John Wiggins X8193 wiggins@njit.edu GITC 2107
Electrical & Computer Engineering Technology – **ECET** **BSET Degree**	ABET accredited. Prepares students for careers like Systems Designer, System Verification Engineer, Hardware or Software Engineer, Telecommunications Specialist, Systems Analyst, Clinical Engineer, Biomedical Technician.	Richard Vanderbilt X7155 Richard.w.vanderbilt@njit.edu GITC 2113
Mechanical Engineering Technology - **MET** **BSET Degree**	ABET accredited. Very similar to ME however, Math/Physics is less rigorous and the application of the material is practical not theoretical.	Arijit Sengupta X7073 sengupta@njit.edu GITC 2102
Medical Informatics Technology – **MIT** **BSET Degree**	Health Care + Computer Technology = How health data is stored, communicated, security of medical data, medical expert systems, and how data is used in clinical decision making, how computers/telecommunications can support this process.	David Lubliner X2878 lubliner@njit.edu GITC 2509
Surveying Engineering Technology – **SET** **BSET Degree**	ABET accredited. The study of the scientific measurement, assemble and assess land & geographic information, use of that information for the planning of what to do with the land & sea. Focus on the technical, theoretical and legal aspects of surveying.	Laramie Potts X8191 Lpotts@njit.edu GITC 2510
Technology Education – **TEED** **BSET Degree**	Designing, developing, and utilizing technological systems such as communication, transportation, manufacturing, and construction technologies.	Thomas Juliano X5694 Thomas.juliano@njit.edu GITC 2103
Manufacturing Engineering Technology – **MNET BSET Degree**	Provides a foundation in fabrication, metrology, quality control, industrial statistics/six sigma, manufacturing management, plastics processing, and packaging.	Samuel Lieber X6368 Samuel.lieber@njit.edu GITC 2113

*this information has been adapted from the NJIT.edu website. Please visit engineering.njit.edu for more information