Fast Track equivalencies

Chemical Engineering Program

Graduate Course	Undergraduate course
CHEN 5334 Biochemical Engineering	CHEN 4311 Biochemical Engineering
CHEN 5333 Chemical & Catalytic Reactor Engineering	CHEN 4373 Chemical Reactor Engineering
CHEN 5309 Separation Process	CHEN 4389 Mass Transport Phenomena
CHEN 5361 Advanced Process Dynamics & Control	CHEN 4392 Process Dynamics & Control

Civil Engineering Program

Graduate Course	Undergraduate Course
CEEN 53XX	CEEN 4336 (Engineering Elective)

Computer Science Program

Graduate Course	Undergraduate Course
CSEN 5314 Database Systems	CSEN 3314 Database Systems
CSEN 5322 Operating systems	CSEN 4362 Operating Systems
CSEN 5323 Computer Comm Networks	CSEN 4320 Computer Networks

Electrical Engineering Program

Graduate Course	Undergraduate Course
EEEN 5304 Adv Computer Architecture	EEEN 4344 Computer Architecture and Design
EEEE 5333 Prin of VLSI Circuit Design	EEEE 4310 Intro to VLSI Circuit Design
MHEN 5371 Mechatronic Systems or EEEN 5303 Mechatronic Systems	EEEN 4336 Mechatronics
MHEN 5373 Embedded Mechatronic Sys or EEEN 5339 Embedded System Design	EEEN 4358 Embedded Systems or EEEN 4336 Embedded Systems
EEEN 5303 Nonlinear Systems	EEEN 4336 Nonlinear Systems
EEEN 5303 Intro Plasma Phys and Eng	EEEN 4336 Intro Plasma Phys and Eng
EEEN 5303 Electromech Dyn and Stability	EEEN 4336 Electromech Dyn and Stability

Environmental Engineering

Graduate Course	Undergraduate Course
EVEN 6316 Fundamentals of Environmental Biotechnology	EVEN 4308 Wastewater Treatment
EVEN 6308 Fundamentals of Solid & Hazardous Waste	EVEN 4306 Solid & Hazardous Waste Fundamentals
EVEN 6309 Fundamentals of Air Quality and Pollution Control	EVEN 4386 Air Pollution Control

Industrial Engineering Program

Graduate Course	Undergraduate Course
IEEN 5335 Lean Manufacturing	MEEN 4372 Resource Optimization for DHS
IEEN 5322 Compu Simulation of Indust Sys	MEEN 4373 Info Anal. & Mod. in Sec Eng
IEEN 5322 Compu Simulation of Indust Sys	IEEN 4328 Appl. of Computer Simulation
IEEN 5327 Adv Engineering Project Mnmt	IEEN 4332 Prin of Engr Proj Management
IEEN 5334 Principles of Optimization	IEEN 4334 Lean Manufacturing
IEEN 5312 Supply Chain Management	IEEN 4312 Supply Chain Management
IEEN 5328 Reliability Theory	IEEN 4351 Reliability & Adv. Top. in QC
IEEN 5331 Compu Integrated Manuf Syst	IEEN 4360 Comp. Int. Manuf. Sys.

Industrial Management Program

Graduate Course	Undergraduate Course
IMEN 5330 Six Sigma Quality and Continuous Improvement	ITEN 4352 Quality Assurance
IMEN 5344 Lean Production	ITEN 3349 Lean Production
IMEN 5340 Manufacturing System Management	ITEN 4330 Manufacturing Systems
IMEN 5333 Hazardous Material Management	ITEN 4332 Hazardous Waste and Fire Safety

Mechanical Engineering Program

Graduate Course	Undergraduate Course
MEEN 5313 Numerical Methods in Mech Eng	MEEN 4346 Computatnl Methods in Mech Eng
MEEN 5314 Finite Element Methods in Eng	MEEN 4354 Intro to Finite Elem Method
MEEN 5326 Control Systems Engineering	MEEN 4344 Control of Systems
MEEN 5333 Polymer Science	MEEN 4382 Polymer Science & Engineering
MEEN 5335 Advnd Robotics and Automation	MEEN 4355 Robotics I
MEEN 5349 Mechanical Vibrations	MEEN 4345 Engineering Vibrations

Natural Gas Engineering Program

Graduate Course	Undergraduate course
NGEN 5309 Separation Processes	NGEN 4389 Separation Processes
NGEN 5325 Natural Gas Prod. & Distribution	NGEN 4396 Natural Gas Production, Evaluation & Testing
NGEN 5360 Natural Gas Processing	NGEN 4383 Natural Gas Processing
NGEN 5387 Quantitative Well-Log Analysis	NGEN 4387 Seismic Interp. & Well Logging