

Russ College of Engineering and Technology

Master of Science in Electrical Engineering

Online Welcome Packet

SPRING 2017



Congratulations on being admitted into Ohio University's Master of Science in Electrical Engineering online degree program! This packet contains important information that you will need to know for your first semester starting on Monday, January 9th.

Please review the following pages to learn more about:

- Online MSEE Master Academic Calendar
- Online MSEE Course Descriptions
- Technology Requirements
- Registration Instructions
- Ohio University Access Information
 - o Ohio University Email
 - o Activate OHIO ID
 - o My OHIO
- Getting Started in Classes
 - New Student Orientation and Blackboard
 - Registration Instructions
- Contact Information
 - o Helpdesk
 - o Program Manager
 - o Financial Aid
 - Bursar's Office
- Academic Policies

Checklist: To-Do's Before Class

- ✓ Activate Ohio University ID
- Test your OU email and check frequently
- ✓ Register for Spring courses by Friday January 6th, 2017 by 5 pm EST
- ✓ Complete New Student Orientation course by Wednesday January 4th, 2017 5pm EST
- ✓ Complete 2016 2017 FAFSA and additional steps for financial aid, if applicable http://www.ohio.edu/financialaid/index.cfm
- ✓ Ensure technology requirements met (Please Refer to Technology Requirements Page)



Ohio University Master of Science in Electrical Engineering Academic Calendar

Spring 2017									
EMGT 6010	Engineering Writing	3	Core	1/6/17	1/9/17	1/6/17	2/26-3/4	4/22/17	4/24-28
EE 5003	Computational Tools for Engin.	3	Core	1/6/17	1/9/17	1/6/17	2/26-3/4	4/22/17	4/24-28
EE 5403	Microwave Theory and	3	EN, Gen. EE,	1/6/17	1/9/17	1/6/17	2/26-3/4	4/22/17	4/24-28
	Devices		Com/DSP						
EE 5713	Communication Engineering	3	AUV, General	1/6/17	1/9/17	1/6/17	2/26-3/4	4/22/17	4/24-28
			EE, Com/DSP						
EE 5143	Design of Digital Circuits	3	EN, AUV	1/6/17	1/9/17	1/6/17	2/26-3/4	4/22/17	4/24-28
EE 5683	Computer Architecture	3	EN, AUV	1/6/17	1/9/17	1/6/17	2/26-3/4	4/22/17	4/24-28
EE 6033	Inertial Navigation Systems	3	Gen. EE,	1/6/17	1/9/17	1/6/17	2/26-3/4	4/22/17	4/24-28
			Comp. Eng.,						
			MDNS						
EE 6053	Satellite Based Navigation	3	Comp. Eng. &	1/6/17	1/9/17	1/6/17	2/26-3/4	4/22/17	4/24-28
	Systems		MNDS						
Summer 2017	7								
					1				
EMGT 6010	Engineering Writing	3	Core	TBD	TBD	TBD	TBD	TBD	TBD
EMGT 6010 EE 5003	Engineering Writing Computational Tools for Engin.	3	Core Core	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD
EE 5003	Computational Tools for Engin.	3	Core	TBD	TBD	TBD	TBD	TBD	TBD
EE 5003 EE 5673	Computational Tools for Engin. Embedded Systems	3	Core Core	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD
EE 5003 EE 5673	Computational Tools for Engin. Embedded Systems State Space Methods in	3	Core Core AUV, Gen. EE,	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD
EE 5003 EE 5673 EE 6283	Computational Tools for Engin. Embedded Systems State Space Methods in Control	3 3 3	Core Core AUV, Gen. EE, Com/DSP	TBD TBD TBD					
EE 5003 EE 5673 EE 6283	Computational Tools for Engin. Embedded Systems State Space Methods in Control	3 3 3	Core Core AUV, Gen. EE, Com/DSP Gen. EE,	TBD TBD TBD					
EE 5003 EE 5673 EE 6283	Computational Tools for Engin. Embedded Systems State Space Methods in Control	3 3 3	Core Core AUV, Gen. EE, Com/DSP Gen. EE, Comp. Eng.,	TBD TBD TBD					
EE 5003 EE 5673 EE 6283 EE 5183	Computational Tools for Engin. Embedded Systems State Space Methods in Control Micro and Nano Fabrication	3 3 3 3	Core Core AUV, Gen. EE, Com/DSP Gen. EE, Comp. Eng., MNDS	TBD TBD TBD TBD	TBD TBD TBD TBD	TBD TBD TBD TBD	TBD TBD TBD	TBD TBD TBD	TBD TBD TBD TBD
EE 5003 EE 5673 EE 6283 EE 5183 EE 6063	Computational Tools for Engin. Embedded Systems State Space Methods in Control Micro and Nano Fabrication Integrated Navigation Systems	3 3 3 3	Core Core AUV, Gen. EE, Com/DSP Gen. EE, Comp. Eng., MNDS EN	TBD TBD TBD TBD					
EE 5003 EE 5673 EE 6283 EE 5183 EE 6063	Computational Tools for Engin. Embedded Systems State Space Methods in Control Micro and Nano Fabrication Integrated Navigation Systems Aviation Standards, Software	3 3 3 3	Core Core AUV, Gen. EE, Com/DSP Gen. EE, Comp. Eng., MNDS EN	TBD TBD TBD TBD					

Fall 2017									
EMGT 6010	Engineering Writing	3	Core	TBD	TBD	TBD	TBD	TBD	TBD
EE 5003	Computational Tools for Engin.	3	Core	TBD	TBD	TBD	TBD	TBD	TBD
EE 5673	Embedded Systems	3	Core	TBD	TBD	TBD	TBD	TBD	TBD
EE 5853	Electronic Navigation Systems	3	EN, AUV	TBD	TBD	TBD	TBD	TBD	TBD
EE 5313	Optoelectronics and Photonics	3	MNDS	TBD	TBD	TBD	TBD	TBD	TBD
EE 6713	Digital Signal Processing	3	Gen. EE, Com/DSP	TBD	TBD	TBD	TBD	TBD	TBD
EE 6743	Information Theory and Coding	3	Com/DSP, Comp. Eng.	TBD	TBD	TBD	TBD	TBD	TBD
EE 6183	Nanoelectronic Devices and Applications	3	Comp. Eng & MNDS	TBD	TBD	TBD	TBD	TBD	TBD
Summer 2017									
EMGT 6010	Engineering Writing	3	Core	TBD	TBD	TBD	TBD	TBD	TBD
EE 5003	Computational Tools for Engin.	3	Core	TBD	TBD	TBD	TBD	TBD	TBD
EE 5673	Embedded Systems	3	Core	TBD	TBD	TBD	TBD	TBD	TBD
EE 6283	State Space Methods in Control	3	AUV, Gen. EE, Com/DSP	TBD	TBD	TBD	TBD	TBD	TBD
EE 5183	Micro and Nano Fabrication	3	Gen. EE, Comp. Eng., MNDS	TBD	TBD	TBD	TBD	TBD	TBD
EE 6063	Integrated Navigation Systems	3	EN	TBD	TBD	TBD	TBD	TBD	TBD
EE 6083	Aviation Standards, Software Design and Certification	3	EN	TBD	TBD	TBD	TBD	TBD	TBD
EE 5753	Computer Communication	3	Com/DSP,	TBD	TBD	TBD	TBD	TBD	TBD
Comition 2018	Networks		Comp. Eng						
Spring 2018	Engineering Writing	2	Coro	TPD	TBD	TPD	TDD	TDD	TBD
EMGT 6010	Engineering Writing	3	Core	TBD	+	TBD	TBD	TBD	
EE 5003	Computational Tools for Engin.	3	Core	TBD	TBD	TBD	TBD	TBD	TBD
EE 5143	Design of Digital Circuits	3		TBD	TBD	TBD	TBD	TBD	TBD
EE 5403	Microwave Theory and Devices		MNDS, Gen. EE, EN,	TBD	TBD	TBD	TBD	TBD	TBD

		Com/DSP,						
EE 5683	Computer Architecture	MNDS, Comp.	TBD	TBD	TBD	TBD	TBD	TBD
		Eng.,						
EE 5713	Communication Engineering	Gen. EE.,	TBD	TBD	TBD	TBD	TBD	TBD
		Com/DSP, AUV						
EE 6053	Satellite Based Nav. Systems	EN, AUV	TBD	TBD	TBD	TBD	TBD	TBD

*Dates	above	are	subi	iect	to	chang	ge

TRACKS/Specialization

- General Electrical Engineering
- Autonomous Unmanned Vehicles
- Computer Engineering
- Electronic Navigation
- Micro Nano Devices and Systems
- Communication & Digital Signal Processing



Course	Pre-req (must complete prior)
EE 5853 Electronic Navigation Systems	EE 5003 Computer-Aided Tools for Engineers
EE 6713 Digital Signal Processing	EE 5003 Computer-Aided Tools for Engineers
EE 5403 Microwave Theory and Devices	EE 5003 Computer-Aided Tools for Engineers
EE 5713 Communication Engineering	EE 5003 Computer-Aided Tools for Engineers
EE 6053 Satellite Based Navigation Systems	EE 5003 Computer-Aided Tools for Engineers
EE 6033 Inertial Navigation Systems	EE 5003 Computer-Aided Tools for Engineers
EE 6283 State Space Methods in Control	EE 5003 Computer-Aided Tools for Engineers
EE 6063 Integrated Navigation Systems	EE 5003 EE 5003 Computer-Aided Tools for Engineers
	EE 6033 Inertial Navigation Systems
	EE 6053 Satellite Based Navigations Systems
EE 6103 Vehicle Control Systems	EE 5003 Computer-Aided Tools for Engineers
	EE 6283 State Space Methods in Control

Online MSEE Course Descriptions

EMGT 6010 Technical Writing

Designed to help students to develop the ability to think critically as a professional communicator by asking appropriate questions that will enable them to understand, develop, and produce effective communication using the following elements of thought: purpose, basic concepts, information sources and needs, underlying assumptions, inferences/conclusions, implications/consequences, points of view, and questions raised and addressed.

EE 5003 Computational Tools for Engineers

This course provides an introduction to computational tools used extensively throughout graduate study in engineering. Topics include array manipulation, matrix computations, computer graphics, and symbolic manipulation. Also covered are programming language constructs and advanced data types. In addition, the course introduces computer-based modeling, simulation, and analysis of dynamic systems. Course concepts will be applied to graduate-level engineering problem solving.

EE 5183 Micro Nano Fabrication

Basic steps of fabrication used in the manufacturing of micro and nanoscale electronic devices. Si BiCMOS technology to be relevant to industry applications, while novel fabrication tools and processes used in the nanoscale engineering also included. Nanotechnology materials, devices and technologies that serve computing, communication and medical applications. Example applications chosen from CMOS chips, novel nanomaterials, MEMS/NEMS, photonics, and biomedical engineering.

EE 5403 Microwave Theory and Devices

Introduction to radiating systems, including descriptive parameters, radiation integrals, current distributions and their effect on antenna patterns, and how antenna arrays function. In addition, waveguiding systems at microwave and optical frequencies discussed.

EE 5673 Embedded Systems

Introduction and history of embedded systems; defining embedded system using requirements; embedded system processors including microcontrollers, low-power microprocessors, digital signal processors and Field Programmable Gate Arrays (FPGA); distributed embedded systems; timing aspects of embedded systems; real-time operation and real-time operating systems as applied to embedded systems; the economy of embedded systems; fault tolerance; communication protocols overview and more detailed description of the Controller Area Network (CAN) and Time-Triggered Protocol (TTP) as well as some wireless networks used in wireless sensor networks; defining interfaces and the use of mixed-signal systems (digital and analog); design methodologies and tools.

EE 5713 Communication Engineering

Fundamentals of communication system engineering, at the physical layer. Resources available for communication system design. Probability and stochastic processes for communication systems, including noise. Analog communication systems and their performance. Baseband digital communications, carrier modulated digital communications. Basic link budget analysis.

EE 6283 State Space Methods in Control

Introduction to state-space methods for control system analysis and design. Topics include basic state-space concepts, writing state equations, solution of the state equation and the matrix exponential, relations to transfer functions, controllability and observability, stability, state-space methods of design including state feedback, state estimation, servomechanisms and an introduction to optimal control.

EE 5853 Electronic Navigation Systems

Principles and theory of operation of electronic navigation systems with emphasis on avionics; aircraft instrumentation, VOR, DME, Inertial, Omega, LORAN, ILS, MLS, Transit, GPS, and air traffic control.

EE 6033 Inertial Navigation System

Principles of operation of inertial navigation systems. Topics include rigid body kinematics, observation equations, attitude update, earth rate and transport rate, position and velocity updates, initialization, orientation, sensor technology, error sources and propagation, Schuler period, vertical instability. Heavy emphasis on simulation in MATLAB.

EE 6053 Satellite Based Navigation Systems

Some knowledge of GPS, navigation, mathematics, and computer science useful. Computer programming experience in MATLAB. Theoretical development of spread spectrum ranging and positioning with space-based transmitters; ephemerides, broadcast signal structure; ranging observables; absolute and relative positioning methodologies; simple error source characterization and mitigation.

EE 6063 Integrated Navigation Systems

Theoretical development of positioning and navigation with multiple sensors; basics of estimation theory; classical versus Bayesian estimators; complementary filters, least squares estimators, Kalman filters and particle filters used for navigation purposes; application examples including GPS/INS integration and integration of INS with electro-optical sensors; fault detection and isolation.

EE 6083 Aviation Standards, Software Design, and Certification

Overview of aviation standards including Federal Aviation Regulations, Technical Standard Orders, Advisory Circulars, RTCA documents and ARINC standards; systems engineering; safety-critical systems and the safety assessment of these systems; certification of aircraft systems; software design using military and civilian standards, IEEE software standards, software life cycle processes, program design language, documentation, testing, independent test verification, case studies.

EE 5143 Design of Digital Circuits

Digital design of microelectronic circuits, simulation, verification, and specification. Structural design concepts, design tools. VHDL language, data types, objects, operators, control statements, concurrent statements, functions, and procedures. VHDL modeling techniques, algorithmic, RTL, and gate level designs. Introduction to very large scale integration (VLSI) technology and design of CMOS integrated circuits. VLSI fabrication process, design rules, logic design, performance estimation, chip engineering, and computer aids to VLSI design. Emphasis on virtual prototyping, circuit design, optimization, verification, and testing. Design synthesis.

EE 5313 Optoelectronics and Photonics

Introduction to fundamentals of the light propagation in solid media, passive devices like waveguides and optical fiber. Introduction to important modern active optoelectronic devices. Emphasizes basic physical theory needed to understand LEDs, laser diodes, photodetectors, photovoltaics and their construction and applications.

EE 5683 Computer Architecture

Emphasis on the design of advanced architectural concepts for multicores; performance trade-offs for multicores, advanced pipelining, superscalar and dynamic scheduling, limits of instruction level parallelism, multithreading and multicores, multi-level caching, virtual memory, I/O fundamentals and techniques, classification of parallel machines, shared memory multiprocessors, cache coherence, interconnection networks and clusters. Term paper/project involving computer hardware design and system simulation required.

EE 6713 Digital Signal Processing

Familiarity with probability and stochastic signals; linear system analysis; basic DSP expected. Review of discrete time signals and systems, the z-transform, sampling. Transform domain analysis. Design of IIR and FIR filters; DFT, FFT, and Fourier analysis, spectrum and eigenanalysis, parametric signal modeling.

EE 6103 Vehicle Control Systems

Introduction to vehicle motion control theory and design. Topics include: Modeling: 6DOF reference coordinate systems, (rigid-body) nonlinear equations of motion, modeling of aerial, ground and marine vehicles, performance specifications; Model simplification techniques: linearization, frozen-time, mode decoupling, order reduction; State-space controller design methods: state space coordinate transformation, controllability and observability, zero-dynamics, dynamic inverse, integral-feedback; Overview of advanced topics: nonlinear control methods; stability margin to regular and singular perturbations, disturbance rejection, flexibility of vehicle, loss of control recovery and fault tolerance, autonomous control.

EE 5753 Computer Communication Networks

Computer networks with an emphasis on the design and working of the Internet. Protocol layers, service models, HTTP, FTP, electronic mail, UDP, TCP, congestion control, hierarchical routing, internet protocol (IP), IPv4, IPv6, data link layer, error correction and detection, multiple access protocols, Ethernet, bridges, hubs, wireless links, PPP, ATM, multimedia over IP, 4G wireless, Bluetooth. Basic queueing theory and delay analysis. Basic security mechanisms, such as encryption, authentication and firewalls.

EE 6743 Information Theory and Coding

Introduction to information theory. Entropy as a measure of uncertainty. Relative entropy, mutual information. Characteristics of sequences and entropy rate. Lossless data compression and source coding. Bounds and relations for channel capacity. Error correction and error detection codes, lossless and lossy compression of signals and images.

EE6183 Nanoelectric Devices and Applications

Introduces fundamental and advanced concepts required for the understanding of electronic and ionic transport in micro and nanoscale devices. Reviews theory elements such as effective mass, band structure, electrostatics, screening, low and high-field transport, and scattering. Explores novel design tools and numerical techniques used for simulation of practical devices. Examines more closely the structure, operation, design principles, advantages and disadvantages, applications and future prospects.

Technology Requirements

- 1. Webcam: Computer equipped with build-in or external webcam and audio capabilities.
- 2. **Document Scanner:** Sheet fed/Flatbed Document Scanner or Smart Phone with camera. The following apps are available to convert a document photo to an Adobe PDF file:
 - a. CamScanner iOS and Android
 - b. Document Scanner Android
 - c. JotNot or TurbScan iOS

<u>Recommended browsers:</u> Mozilla Firefox or Google Chrome. Certain versions of Microsoft Internet Explorer are also supported. At this time, Explorer 10 running under Windows 8 is not advised. For a full listed of supported Browsers, refer to the following list: <u>Browser support for Blackboard</u>

Please check your browser using the following website: http://www.ohio.edu/oit/bbsupport/

Recommende	d System Requirements				
Operating System:	7 or 8 Mac OS 10.6, 10.7 or 10.8				
Processor:	Minimum: 2 GHz or faster				
RAM:	Minimum: 2 GB of RAM or higher				
Internet Connection:	Broadband (high-speed) Internet connection with a minimum download speed of 1.5 Mbps and an upload speed of .2 Mbps, ideally .5 Mbps. Use the following website to determine your Internet speeds: http://www.speakeasy.net/speedtest/				
Microsoft Office:	Windows minimum: Microsoft Office 2003 and up; Recommended: Office 2010; Microsoft Office available through OHIO Virtual Desktop. Equivalents: OpenOffice or Google Docs. Mac minimum: Microsoft Office 2004 and up; Recommended: Microsoft Office 2011; Equivalents: Open Office, Google Docs, or iWorks.				

OHIO Virtual Desktop

Virtual Desktop is a technology which allows students and faculty to access a full Windows desktop environment from a PC or Mac. The virtualized desktop is actually stored on a remote server and programs are executed on this "virtual" PC. When connected to the virtual desktop, the virtual PC screen images are sent to the user's desktop and the user's keystrokes and mouse movements are sent to the virtual PC. You will have access to a variety of applications that you will use for your online courses. You will learn more about this in the New Student Orientation course.

ProctorU Information

Examinations are proctored using the ProctorU system to ensure academic integrity. A nominal fee is required during the setup, which can vary from \$25-30 per exam. Each course will have at least one exam. You are responsible for self-testing the functionality of the different components by following all of the procedures outlined in the ProctorU instructions and will have the opportunity to get comfortable using this software in the New Student Orientation course through a practice exam.

Ohio University subscribes to the Microsoft Campus Software program, which provides both the Windows and Mac versions of Microsoft Office to students at a very reasonable price (\$70). Consequently, we recommend that you use the current version of Microsoft Office – Microsoft Office 2010 for Windows.

Link to Virtual Desktop: https://mydesktop.ohio.edu/ (Note: students will have access after courses have started)

For information about purchasing Microsoft Office 2010 for Windows, go to: http://www.ohio.edu/oit/techdepot/software/software-detail.cfm?customel datapageid 1746007=1747449

If you would like to browse or purchase software at a reduced cost for students, go to: http://www.ohio.edu/oit/techdepot/software/ or call: (740) 593-1222.

Ohio University Access Information

Ohio University Email

All correspondence from the University will be sent to your OU email address. It is vital for you to check this email account frequently for important updates and items needing your attention.

Catmail: https://catmail.ohio.edu/

Ohio E-mail Information: http://www.ohio.edu/technology/email

Activate OHIO ID

Upon official acceptance, you'll receive an email directly from OU about activating your OHIO ID. Your OHIO ID and password are your keys to most online services at Ohio University. Before following the activation link below, make sure you have your PID. You were assigned your PID during the application process. If you do not have it, please feel free to reach out your program coordinator or your enrollment advisor and they'll be able to provide it for you.

If you have any problems activating your OHIO ID, please contact the Service Desk at 740-593-1222 or servicedesk@ohio.edu.

Activate OU ID: https://webapps.ohio.edu/myid/index.cfm?formType=P

My OHIO

My OHIO can be accessed at https://my.ohio.edu. You'll sign in using your OHIO ID and password. This is your student portal, where you'll have access to an extensive amount of information and resources. Within My OHIO, you'll have access to "Student Center" where you can check your financial aid, view your bill, enroll in a payment plan, etc. Please be sure to access your "To-Do list" on My OHIO as well.

My OHIO To-Do List: http://www.ohio.edu/graduate/apply/faq.cfm. Once you click the link, click on "How do I review To Do items" in My OHIO Student Center.

Getting Started in Classes

AFTER ACTIVATING OHIO ID, THE STUDENT WILL HAVE ACCESS TO REGISTRATION. ONCE REGISTERED, THE STUDENT WILL NEED TO TELL RUTH THE OHIO ID, DURING THE WELCOME CALL, SO SHE CAN ADD THE STUDENT TO THE ORIENTATION.

Registration Instructions- If you were unable to register on your own, you will be registering with Ruth during the Welcome Call. The Program Manager will provide registration instructions via email each semester. Registration questions should be directed to your PM. PLEASE MAKE SURE TO BE IN FRONT OF A COMPUTER DURING THE WELCOME CALL.

Textbooks

You will be responsible for ordering the required textbooks for each class. I will send you the applicable textbook information and ordering instructions before the start of each semester. Please make sure to promptly order your textbooks as soon as the information becomes available to ensure you receive them in plenty of time for the first day of class.

New Student Orientation and Blackboard

The new student orientation is a mandatory two week course that imitates a real course. During the course, you'll learn how to successfully complete various tasks that are going to be expected of you once your first class begins on January 9th. The expected time commitment for the orientation course is typically between eight to twelve hours. **The New Student Orientation will be available November 14th and only after a student registers for courses**. Ruth will communicate via email once is available) and is accessed through Blackboard, along with the rest of your program courses.

Courses may be accessed at https://blackboard.ohio.edu/

If you have questions relating to technical support for Blackboard please reach out to Blackboard support at:

 $\textbf{Blackboard Support Portal:} \ \underline{http://bbcrm.edusupportcenter.com/ics/support/default.asp?deptID=8087}$

Blackboard Support Main Webpage: http://www.ohio.edu/oit/bbsupport/

OIT phone: 740-593-1222 Please visit http://www.ohio.edu/oit/help/index.cfm for hours of operation.

For tips and "How To" guides related to Blackboard 9:

http://www.ohio.edu/oit/bbsupport/howto/students/index.cfm

Email Help Desk: bbsupport@ohio.edu

Tuition

Residents- \$25,200 or \$700 per credit hour **Non Residents**- \$25,884 or \$719 per credit hour

Fees

Virtual desktop technology fee- \$16 per credit hour Proctoring Fee-\$25/\$30 per exam (each course will have at least one exam) Technology Fee- \$24 per semester

Billing

Students may view their e-account online (www.ohio.edu/finance/bursar/eAccount.cfm) – Most account activity will show up within 24 hours.

- ➤ Bills are issued on the first of the following month after registration and are due on the 21st of that month
- Acceptable forms of payment include: MasterCard, Discover, American Experess, Visa, eCheck, personal Check (by mail) financial aid and monthly installments
- The office of the Bursar produces the student account eBill which includes charges and payment activity as well as payment due date. eBill notifications are emailed to your Ohio University email account
- ➤ Employer Reimbursement- Be prepared to pay tuition up front until your employer has provided reimbursements
- ➤ Payment Plan- Consists of 4 monthly payments per semester for a total of 12 monthly payments during the academic year. Students must pay \$40 non-refundable enrollment fee each semester. For more information about the payment plan, please contact the Bursar's office at bursar@ohio.edu or 740.593.4191

Financial Aid/Veterans Affairs

If you are using Financial Aid, you will need to complete the FAFSA form (www.fafsa.ed.gov)

- Summer 2016 cohort will need to complete the 2016-2017 FAFSA
- > FAFSA-OU Federal ID Code: 003100
- Master Promissory Note: Once your Award Letter is received, you will need to complete the Master Promissory Note. You can access the MPN and Entrance Counseling at https://studentloans.gov/
- All first-time Federal Direct Student Loan borrower will also need to complete the Entrance Counseling online

General Financial Aid Information

- Financial Aid is generally awarded 3-4 weeks of Ohio University receiving the completed FAFSA and the student being accepted into the program
- > Disbursements are made during the first week of each semester
- > Refunds are direct deposited into the student's account the first day of each semester
- Students must register for at least 5 credit hours each semester in order to receive financial aid

SAP- (Satisfactory Academic Progress)

➤ If receiving financial aid, students must have a 3.0 GPA at the conclusion of the spring semester-GPA is reviewed annually

Veterans Affairs

For active or retired military personnel or individuals who would like to utilize military veteran's education benefits, please read http://www.ohio.edu/registrar/veteran_services.cfm for details (also please contact the Veterans Affairs Office).

Advice for students

- ➤ For each class, you will want to dedicate on average about 8-12 hours per week for studies which will include: reading, writing, participating in discussion board posts, quizzes, papers group work etc. Please keep in mind that the 8-12 hours per week per course for studies is an average feedback we received from professors and students. Depending on the student and the course, it may take more or less.
- There is no specific log-in time, but will have due dates. Due dates are on Eastern Time and will be outlined in the syllabus.

Enrollment Rules

- ➤ If accepted and not starting in that semester, the student must enroll within the first year to avoid having to reapply
- Must complete the program within 6 years from the start date

Registration is <u>now open</u> for Fall 2016. **Please use the course requisites list below when selecting and registering for your summer courses.** I have included all of the course offerings and registration instructions below.

Please remember you'll need to register for two courses in order to stay on track towards degree completion. If you run into any error messages or have questions, please don't hesitate to reach out to me.

Course	Course Requisites
EMGT 6010 Engineering Writing	Admission to MSEE program
EE 5003 Computational Tools for Engineers	Admission to MSEE program
EE 5673 Embedded Systems	Pre-Requisite: EE 5003; Co-Requisite: EMGT 6010
EE 5853 Electronic Navigation Systems	Pre-Requisite: EE 5003; Co-Requisite: EMGT 6010

Spring 2017 Couse Offerings (January 6th - April 25th)

EE 5003 Computational Tools - Foundation REQUIRED 1st SEMESTER

EMGT 6010 Engineering Writing – Foundation RECOMMENDED 1st SEMESTER

EE 5403 Microwave Theory and Devices

EE 5713 Communication Engineering

EE 6033 Inertial Navigation Systems

EE 6053 Satellite Based Navigation Systems

EE 5143 Design of Digital Circuits

EE 5683 Computer Architecture

Registration Instructions:

You will need the following course numbers/CRNs when registering for your courses:

EE 5003 (Section 1002): ****

EMGT 6010 (Section 1004): ****

EE 5403 (Section 1002): ****

EE 5403 (Section 1002): ****

EE 5713 (Section 1002): ****

EE 5683 (Section 1002): ****

Step 1: Login to: https://my.ohio.edu (you received instructions of how to activate your My OHIO account during the application process).

Step 2: Under the **Customize** drop down click **Add Stuff**

Step 3: Type in the search box **Student Center**

Step 4: Scroll over My OHIO Student Center Admissions click the Add button in the left hand corner

Step 5: Wait for the page to refresh, scroll down to view the **My OHIO Student Center Admissions** link added to your My Ohio Portal

Step 5: Click **My OHIO Student Center** and log in again (if required)

Step 6: Click **Enroll**, ensure you are registering for **Fall**, and click **continue**

Step 7: Click on the **Add** tab, enter your **CRN** and press **Enter**

Step 8: Click on the Add tab, enter your second CRN and press Enter

Step 9: You should receive confirmation that your chosen course has been added to your cart. Make sure your course is correct (EE 5003 & EMGT 6010) and click **Proceed to Step 2 of 3**

Step 10: Read and agree to Financial Agreements by clicking on the link OHIO University Financial Agreement. Click on **I Agree** to proceed with registration

Step 11: Click **Finish Enrolling.** You should now be enrolled for your courses!

Step 12: For each course you will see a status that indicates if it was successfully added or if there is an error. If you notice an error, review the message to find out why. **Please contact me if you receive an error message.**

Tuition Refund Policy:

Fall 2016

Last day to withdraw for 100% refund: January 6^{th} , 2017 by 11:59 pm EST Last day to withdraw with 80% refund: January 20th, 2017 at 5:00 pm EST Last day to withdraw 0% refund: March 24^{th} , 2017 at 5:00 pm EST

I have included the necessary textbook information for each of the summer 2016 courses below. Please find the courses you'll be taking and order the necessary textbooks at your earliest convenience to ensure you have them in plenty of time for the start of class. Let me know if you have any questions. Have a great day!

Ohio University Bookstore: http://bookstore.mbsdirect.net/vb home.php

EE 5003 Computational Tools for Engineers

Required Text

Hann, B., Valentine, D., Essential MATLAB for Engineers and Scientists, 5th Edition, 2013, Academic Press, ISBN-13: 9780123943989

EMGT 6010 Engineering Writing

Required Text

Course Pack- TBD

EE 5403- Microwave Theory & Devices

Required Text

TBD

EE 5713- Communication Engineering

Required Text

TBD

EE 6033- Inertial Navigation Systems

Required Text

TBD

EE 6053- Satellite Based Navigation Systems

Required Text

TBD

EE 5143- Design of Digital Circuits

Required Text

TBD

EE 5683- Computer Architecture

Required Text

TBD

Contact Information

Helpdesk

Blackboard Support Portal: http://bbcrm.edusupportcenter.com/ics/support/default.asp?deptID=8087

Blackboard Support Main Webpage: http://www.ohio.edu/oit/bbsupport/

OIT phone: 740-593-1222 Please visit http://www.ohio.edu/oit/help/index.cfm for hours of operation.

For tips and "How To" guides related to Blackboard 9:

http://www.ohio.edu/oit/bbsupport/howto/students/index.cfm

Email Help Desk: bbsupport@ohio.edu

For questions relating to your OU e-mail, passwords, etc. please reach out to our OHIO IT Support:

OHIO Information Technology (OIT) website: http://www.ohio.edu/oit/

OIT phone: 740-593-1222. Please visit http://www.ohio.edu/oit/help/index.cfm for hours of operation.

OIT email: servicedesk@ohio.edu

For questions relating to Remote Proctor Now:

Contact information for Remote Proctor Now Technical Support: Technical support is available by phone 24/7 for students from Software Secure at 1-866-811-0719 or by clicking the following link: http://clientportal.softwaresecure.com/support/index.php?/Core/Default/Index, where students will be able to either (1) search the Knowledge Base (KB) to find the answer to their question; or, (2) open a web-ticket which will be promptly answered by Software Secure Technical Support.

Program Coordinator

Ruth Crisostomo

Email: RCrisostomo3@onlineprograms.ohio.edu

Phone: (866) 310-2890 ext. 5160 or (740)-331-6092 Ext 5160

Office hours: Monday, Wednesday, Thursday and Friday: 8am-5pm, Tuesdays: 10:30am-7:30pm

Financial Aid

Lisa Butler-financial.aid.elearn@ohio.edu or (740) 593-4141

Office of Student Financial aid: http://www.ohio.edu/financialaid/

Bursar's Office

Email: bursar@ohio.edu Phone: (740) 593-4130

Office Hours: Monday - Friday, 8:00 a.m. to 5:00 p.m.

Note: Students should use the My OHIO portal (Accounts tab) to access their student account information on My OHIO Student Center. Students can view real time account activity, view historical eBills, enroll in Direct Deposit, enroll in Payment Plan, view 1098-T information, add an Authorized User and make payments.

To make a payment on your student account, sign in to My OHIO, access the Accounts tab, and sign in to My OHIO Student Center. In your student center choose Make a Payment. This will direct you to our online payment processor. Please be sure to turn off any pop up blockers for your browser.

To view historical eBills and 1098-T information, choose the Make a Payment link on My OHIO Student Center.

http://www.ohio.edu/finance/bursar/index.cfm#

Russ College of Engineering and Technology Graduate Programs

Academic Policies

A complete list of academic policies can be found in the Graduate Catalog. Please follow the link below.

http://www.catalogs.ohio.edu/index.php?catoid=41

- Students must maintain a cumulative GPA of 3.0 (on a 4.0 scale) across the duration of their program. A student earning less than 3.0 will be placed on academic probation the following academic term (this includes summer sessions for which you enroll). If the student achieves a cumulative 3.0 GPA after the following term, he or she will be removed from probation. If the student's cumulative GPA is still below 3.0 at the end of the next term, the student's status will be reviewed by the School's Graduate Committee. A student on academic probation who does not demonstrate satisfactory progress towards the minimum 3.0 GPA will be dismissed from the program.
- Students must earn a minimum grade of C (2.0 grade points) for any single course to count towards the degree requirements. No more than two courses with a grade of B-, C+, or C may count toward the degree requirements. Students receiving a grade less than B- in three or more courses are subject to dismissal. Retaking a course is generally not allowed, although the School's Graduate Committee does have discretion to allow a retake if meaningful hardship during the term can be substantiated by the student. It should be noted that, in the rare case that a student is permitted to retake the course, the original grade will remain on the student's transcript (along with the new grade) and both of these grades will be used in the student's cumulative GPA calculation. Students should keep this policy in mind along with the important withdrawal deadlines listed below.
- Ohio University Graduate College policy states that no graduate-level degree will be conferred for a student whose cumulative graduate GPA is lower than 3.0.

Important Withdrawal Dates:

Last day to withdraw from (drop) an individual class on your semester schedule is the Friday of the 10th week of class.

Note: Course remains on student's academic record with WP/WF grade and no fee adjustment.

Last day to withdraw (drop **all** classes) from the University for each semester is the last Friday of classes). Students should contact college or regional campus student services offices.

Note: Course remains on student's academic record with WP/WF grade and no fee adjustment.

These dates are listed on the official academic calendar for 2016-2017 accessible from the Registrar's website: https://www.ohio.edu/registrar/upload/2016-17-Calendar.pdf