The Professional Learning Program offers a variety of classes for International students to choose from every semester. Students take at least two classes in their major (Information Technology, Business or Industrial Technology), two English courses and one elective course. The elective course can be selected from any of the majors to allow students exposure in a new field. If preferred, students can take a third major course rather than an elective. The following courses are offered in the Spring 2014 semester. All majors have entry level courses that do not require previous experience in the field; however, some courses require previous experience or coursework in that area. Professional Learning Program advisers will work with students individually to establish a suitable course schedule. *Please note that the class list may change at any time due to management discretion.

INFORMATION TECHNOLOGY COURSES
Students who major in Information Technology must take a minimum of two of the following in the Spring 2014 semester:

**IT 301 A+ Certification Training**
Participants study the basics of computer architecture and learn to use a contemporary operating system. Hardware requirements, hardware components, software compatibility, and system installation topics are covered along with post-installation, storage, security and system diagnosis, and repair. Topics also include discussion of current and future technology industry trends.

**IT 311 Introduction to Programming with Java**
A broad introduction to object-oriented programming and the related knowledge necessary to program in a contemporary programming language. This would include coverage of an Application Development Kit, a standard integrated Development environment, and the use of GUI components.

**IT-D 411 Java Programming**
This course covers a broad spectrum of object-oriented programming concepts and application programming interfaces. The participant considers the details of object-orientated development in topics of multi-threading, data structure collections, stream I/O and client interfaces. Software engineering topics of packaging and deployment are covered as well. Hands-on exercises reinforce concepts taught throughout the course. Prerequisite: IT 311.

**IT-D 421 Database Concepts with Oracle**
Basic data modeling concepts are introduced. Hands-on database design, implementation, and administration of single-user and shared multi-user database applications using a contemporary relational database management system.

**IT-D 434 Human/Computer Interaction**
Introduction to human-computer interaction, a discipline concerned with the design, evaluation, and implementation of interactive computing systems for human use. Emphasis is given to the structure of communication between people and computers, capabilities of people to use computers, concerns that arise in designing and building interfaces, design trade-offs, and the process of specification, design, and implementation of user interfaces. Particular emphasis is placed on practical design and usability of computer system user interfaces.

**IT-O 440 Network+ Certification Training**
This course covers current and evolving data network technologies, protocols, network components, and the networks that use them, focusing on the Internet and related LANs. The state of worldwide networking and its evolution will be discussed. This course covers the Internet architecture, organization, and protocols including Ethernet, 802.11, routing, the TCP/UDP/IP suite, DNS, Bluetooth, SNMP, DHCP, and more. Participants will be presented with Internet-specific networking tools for searching, testing, debugging, and configuring networks and network-connected host computers. There will be opportunities for network configuration and hands-on use of tools.

**IT-O 441 Network+ Certification Training II**
Participants learn the details, use, and configuration of network applications. Currently protocols and application technologies considered include SNMP, SMTP, IMAP, POP, MIME, BOOTP, DHCP, SAMBA, NFS, AFS, X, HTTP, DNS, NetBIOS, and CIFS/SMB. Windows workgroups and domains: file and printer sharing, remote access, and Windows networking are addressed. A research paper in the above topic areas is required. Prerequisite: IT-O 440
<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Description</th>
<th>Prerequisite(s)</th>
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<tr>
<td>IT-D 455</td>
<td>Intelligent Device Technologies</td>
<td>Development is covered with various technologies on mobile and robotic platforms. Utilizing contemporary toolkits, the participant considers design and development on emulated and real &quot;smart&quot; devices including smart phones, personal digital assistants, sensors, actuators, and robots. Numerous exercises reinforce concepts gained throughout the course. A term project will integrate course topics into a comprehensive intelligent device application. <strong>NOTE:</strong> In Spring 2014, there would be two sections; one covering Android and one covering Windows phone.</td>
<td>IT-D 411 (Java or C#)</td>
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<tr>
<td>IT-O 456</td>
<td>Linux + Certification Training</td>
<td>Participants learn to set up and configure an industry-standard, open-source operating system including system installation and basic system administration. Also addressed are applications and graphical user interfaces as well as support issues for open-source software.</td>
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<tr>
<td>IT-S 458</td>
<td>Operating System Security</td>
<td>This course will address theoretical concepts of operating system security, security architectures of current operating systems, and details of security implementation using best practices to configure operating systems to industry security standards. Server configuration, system-level firewalls, file system security, logging, anti-virus and anti-spyware measures and other operating system security strategies will be examined.</td>
<td>IT-O 456</td>
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<tr>
<td>IT-D 461</td>
<td>Internet Technologies and Web Design</td>
<td>This course will cover the creation of Web pages and sites using HTML, CSS, Javascript and graphical applications. Networked multimedia distribution technologies are also explored. The design of effective Web site including page layout, user interface design, graphic design, content flow and site structure as well as management of Web site resources including intranet management and design considerations are addressed. Participants design and create a major Web site with multiple pages and cross-linked structures.</td>
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<tr>
<td>IT-M 464</td>
<td>Social Media Marketing</td>
<td>Participants will explore the tactics, tools, and strategies of incorporating new media channels to successfully grow a business and/or to maximize the goals of other types of organizations. Participants will be able to demonstrate knowledge of current tools, tactics, and strategies of Social Media Marketing appropriate to business requirements at the professional, managerial and executive levels. They will apply these techniques in the development of a Social Media Marketing plan appropriate to each of these levels and discuss how Social Media Marketing can be integrated in an organization's overall marketing plan.</td>
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<tr>
<td>IT-D 465</td>
<td>Rich Internet Applications</td>
<td>Participants learn to create interactive rich Internet applications using Web development frameworks, applications, and techniques that primarily operate on the client-side. These applications often exhibit the same characteristics as desktop applications and are typically delivered through a standards-based Web browser, via a browser plug-in, or independently via sandboxes or virtual machines. Current software frameworks used to download, update, verify and execute these applications are addressed as well as writing applications for deployment in these frameworks.</td>
<td>IT-D 461</td>
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<tr>
<td>IT-D 466</td>
<td>Service-Oriented Architectures</td>
<td>This course covers IT enterprise systems employing web services technologies in SOA and ESB architectural patterns. The participants consider SOA which defines and provisions IT infrastructure and allows for a loosely-coupled data exchange over disparate applications participating in business processes. The simplification of integration and flexible reuse of business components within SOA is greatly furthered by ESB. Lab exercises using contemporary toolkits are utilized to reinforce platform-agnostic course topics.</td>
<td>IT-D 411 and IT-D 461</td>
</tr>
</tbody>
</table>
IT-M 470 Fundamentals of Management for Technical Professionals
This course explores fundamentals of management for professionals in high-technology fields. It addresses the challenges of the following: managing technical professionals and technology assets; human resource management; budgeting and managerial accounting; management of services, infrastructure, outsourcing, and vendor relationships; technology governance and strategy; and resource planning.

IT-S 478 Cyber Security Management
In-depth examination of topics in the management of information technology security including access control systems and methodology, business continuity and disaster recovery planning, legal issues in information system security, ethics, computer operations security, physical security and security architecture and models using current standards and models.

IT-T 492 Embedded Systems and Reconfigurable Logic
This course covers reconfigurable intelligent devices programmed with modern high level languages focusing on design and integration to modern environments. The course will also cover the topic and deployment of wireless sensor networks and the use of rapid prototyping for commercial application. Participants will discover hardware, software and firmware design trade-offs as well as best practices in current embedded systems development. A final project will integrate course topics into a system using an embeddable single-board microcontroller. Prerequisite: IT 311 or IT 312.

IT-M 573 Building and Leading Effective Teams
This course will prepare participants to be effective IT managers. Participants will be introduced to the general challenges of management as well as the challenges unique to leading teams of technology professionals. The course will explore the skills necessary to excel as a leader including dealing with conflict, developing leadership skills, recruiting and developing employees, and leading remote and virtual teams. Participants will explore case studies and execute team exercises to enrich their learning experience.

IT-M 574 IT Management Frameworks: ITIL and COBIT
This course will examine the application of industry standard frameworks to the management of information technology infrastructure, development and operations. Frameworks including the Information Technology Infrastructure Library (ITIL), Control Objectives for Information and related Technology (COBIT), and others will be covered. Participants will learn to use these frameworks to tailor a set of concepts and policies to necessary manage IT in a specific enterprise.

INDUSTRIAL TECHNOLOGY
Students who major in Industrial Technology must take two of the following courses in the Spring 2014 semester:

INT 315 Industrial Enterprise
This course provides an introduction to the world of industrial enterprises. The world-wide evolution of business will be considered leading to today's competitive world. The range of industrial activities is reviewed, and students are introduced to the organization and purpose of various industrial sectors.

INT 322 Industrial Project Management
Projects are the driving force behind innovation and improvement in any organization. This course identifies the tools and techniques needed to lead any project to its intended conclusion. Topics include project plans, managing expectations and contingencies, building a winning team, gaining commitments, managing project risks, and development of personal skills critical to the successful project manager.

INT 409 Inventory Control
Fundamentals of inventory control including inventory classifications, i.e. raw materials, work-in-process (WIP), and finished goods. Topics include inventory record keeping, inventory turnover, the 80/20 (or ABC) approach, safety stock, forecasting, dependent and independent demand, lead times, excess/obsolete inventory, and inventory controls. Material Resource Planning (MRP) and Enterprise Resource Planning (ERP) are included.
PL 810 Operations Management
This course covers project management in the PMP framework and provides a structured approach to managing projects using Microsoft Project and Excel. Coverage includes creation of key project management charts (Gantt, Pert, CPM, timelines and resources utilization), basic statistics used in estimating task times, critical path generation in Excel and Project, project cost justification in Excel, SPC and acceptance sampling for machine acceptance, project analysis via simulation, and management of personnel, teams, subcontractors and vendors. Case studies are utilized to demonstrate core concepts and dynamic scheduling.

BUSINESS COURSES
Students who major in Business must take a minimum of two of the following courses in the Spring 2014 semester:

PL 810 Operations Management
This course covers project management in the PMP framework and provides a structured approach to managing projects using Microsoft Project and Excel. Coverage includes creation of key project management charts (Gantt, Pert, CPM, timelines and resources utilization), basic statistics used in estimating task times, critical path generation in Excel and Project, project cost justification in Excel, SPC and acceptance sampling for machine acceptance, project analysis via simulation, and management of personnel, teams, subcontractors and vendors. Case studies are utilized to demonstrate core concepts and dynamic scheduling.

PL 811 Introduction to Marketing
This course provides an introduction to the activities and decisions faced by marketing managers in modern organizations. Topics include: current marketing issues, including customer relationship management (CRM), global marketing, marketing research, supply-chain management and integrated marketing communications (IMC). Special text and classroom focus is placed on Product, Price, Place and Promotion strategies, as they relate to an overall Marketing Plan.

PL 815 Business Strategies
This course is the integration and application of the knowledge and skills learned in the foundation, tools and concepts, marketing, finance and functional field component of business management. Business Strategy focuses on the strategy behind business practices, strategic thinking, and creating successful strategies. It is an experiential course designed to enable each student to understand the necessary components of strategic business decisions and to create them.

PL 819 Essentials of Exporting and Importing
This course provides a comprehensive overview for conducting export and import business in the global arena. Content focuses on U.S. government trade policies and export-import controls, industry practices and international procedures that are essential for business or entrepreneurial success. Instruction ranges from the basics to more advanced marketing strategies for both export and import. The instructor’s newly-published textbook, Essentials of Exporting and Importing, will be the textbook for this course.

PL 820 Theory & Organization of Management
Theory of Organization and Management Introduction to the theory and practice of management; includes basic managerial functions: planning, organizing, leading and controlling. Communication, motivation and decision-making techniques are stressed. Also covered are organization structure and design, the dynamics of individual and group interaction, organization climate, managerial styles, the implication of increasing work force diversity, coping with conflict, and methods for achieving organizational improvement. Issues in international business are dealt with at relevant points.

PL 831 Financial Markets
Theory and applications associated with the functioning of financial markets to include the conceptual foundations of portfolio theory, risk management, and asset valuation. The stock, money, bond, mortgage, and futures and options markets are examined.
### PL 837 Business Statistics
Statistics is the science that deals with collection, description, analysis, interpretation and presentation of data. Statistics can be used to describe a particular data set (termed descriptive statistics) as well as to draw conclusions about the population from a particular data set (termed inferential statistics). Business Statistics applies statistical methods in a business context order to address business related questions and help make evidence based decisions. In Business Statistics you will learn to apply commonly used statistical methods in business context and how to interpret analyses performed by others.

### IT-M 464 Social Media Marketing
Participants will explore the tactics, tools, and strategies of incorporating new media channels to successfully grow a business and/or to maximize the goals of other types of organizations. Participants will be able to demonstrate knowledge of current tools, tactics, and strategies of Social Media Marketing appropriate to business requirements at the professional, managerial and executive levels. They will apply these techniques in the development of a Social Media Marketing plan appropriate to each of these levels and discuss how Social Media Marketing can be integrated in an organization's overall marketing plan.

### IT-M 470 Fundamentals of Management for Technical Professionals
This course explores fundamentals of management for professionals in high-technology fields. It addresses the challenges of the following: managing technical professionals and technology assets; human resource management; budgeting and managerial accounting; management of services, infrastructure, outsourcing, and vendor relationships; technology governance and strategy; and resource planning.

### IT-M 471 Project Management for IT Professionals
Basic principles of project management are taught. This course includes software development concepts of requirements analysis, object modeling and design, and software testing. Management of application development and major Web development projects will also be addressed.

### IT-M 481 Entrepreneurship for IT Professionals
This course prepares participants to become leaders in information technology and to build ITM companies. Participants design and develop a prototype ITM product and prepare a business plan and venture proposal presentation.

### IT-M 482 Business Innovation
This course is designed to teach innovative thinking through theory, methods, and practice of innovation. The course incorporates Einstein’s thinking, and Edison’s method to establish the innovation process that can be applied in current business environment. Current economic conditions and global sourcing requires that innovation becomes a leading tool for developing a competitive edge. Innovation has been considered a competency of educated, design engineering, and a selected few employees that has become insufficient today. Corporations and organizations need innovation to develop customer-specific solutions in almost real time.

### IT-M 573 Building and Leading Effective Teams
This course will prepare participants to be effective IT managers. Participants will be introduced to the general challenges of management as well as the challenges unique to leading teams of technology professionals. The course will explore the skills necessary to excel as a leader including dealing with conflict, developing leadership skills, recruiting and developing employees, and leading remote and virtual teams. Participants will explore case studies and execute team exercises to enrich their learning experience.
### ENGLISH COURSES

Students will take two English courses in the Spring 2014 semester. Students will be given an English assessment upon arrival to determine their English level in listening, reading, speaking and writing and will register for two of the following courses.

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<tr>
<th>Course Code</th>
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<th>Description</th>
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<tbody>
<tr>
<td>PL 421</td>
<td>Listening Enhancement Level 1</td>
<td>Listening Enhancement I is designed to help international students improve academic and social listening. Students will complete a variety of listening-based tasks to increase comprehension and develop strategies for effective listening and note-taking. Frequently used vocabulary terms will also be presented.</td>
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<tr>
<td>PL 422</td>
<td>Listening Enhancement Level 2</td>
<td>Listening Enhancement II is an advanced level Listening course for international students. The course will aid students in comprehending academic lectures and strengthening social listening as well as note-taking skills. Students will complete activities using web-based videos to refine their listening skills. Each unit of study is centered on an academic lecture and the student work that is necessary before, during, and after a university course lecture.</td>
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<tr>
<td>PL 431</td>
<td>Reading/Vocab Develop Level 1</td>
<td>Reading and Vocabulary Development I is designed for international students to develop academic reading skills and increase overall vocabulary. Students will be exposed to a variety of readings in order to build effective strategies for analysis of and interaction with academic texts.</td>
</tr>
<tr>
<td>PL 432</td>
<td>Reading/Vocab Develop Level 2</td>
<td>Reading and Vocabulary Development II is designed to help international students analyze instructor-selected readings for lexical, syntactic, rhetorical, and discursive features. The course will also focus on increasing academic vocabulary and building skills and strategies to improve reading speed and overall comprehension.</td>
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<tr>
<td>PL 440</td>
<td>Fundamentals of Academic Writing</td>
<td>Fundamentals of Academic Writing is designed to introduce international students to the conventions of academic writing and to develop a voice in writing for American audiences. By composing academic paragraphs in a variety of genres, students will gain knowledge of deductive organizational structure, academic formatting, and strategies for avoiding plagiarism.</td>
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<tr>
<td>PL 441</td>
<td>Academic Writing Level 1</td>
<td>Academic Writing I is designed for international students to improve the fluency and accuracy of their writing. Students will reinforce their understanding of argumentation and organization for American academic audiences through the composition and revision of a variety of paragraphs and essays that demonstrate increasing complexity.</td>
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<tr>
<td>PL 442</td>
<td>Academic Writing Level 2</td>
<td>Academic Writing II will prepare international students for research and research writing. Students will learn advanced research skills and apply them through the composition of several academic papers.</td>
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<tr>
<td>PL 461</td>
<td>Effective Communication Level 1</td>
<td>Effective Communication I is designed to help international students improve speaking fluency and pronunciation. This course will focus on skills and strategies to increase confidence in spoken interactions, both in the classroom, and in daily life.</td>
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<tr>
<td>PL 462</td>
<td>Effective Communication Level 2</td>
<td>Effective Communication II is an advanced course in speaking and pronunciation for international students. Topics include developing informational skills, interactional skills, and skills to manage interactions in both academic and social life. Accent reduction and the International Phonetic Alphabet (IPA) will also be addressed.</td>
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</tbody>
</table>