

Date: 1.29.18

To: Undergraduate Studies Committee

Subj: Actions of the Information Technology and Management Curriculum Committee

1. The ITM Curriculum Committee met December 14, 2017 and January 11, 2017. The following actions of the committee were approved by the ITM faculty on January 25, 2018. As none of these actions represent significant changes to the Bachelor of Information Technology and Management, all actions are forwarded to the Undergraduate Studies Committee as information items.
2. In order to accommodate the new Discrete Math course offered by the Department of Applied Mathematics, change the BITM mathematics requirement in the bulletin from the following:

Mathematics Requirements			(6)
MATH 230	Introduction to Discrete Math		3

to read instead:

Mathematics Requirements			(6)
Select one course from the following:			3
MATH 180	Fundamentals of Discrete Math		3
MATH 230	Introduction to Discrete Math		3

3. As of Fall 2018 replace one course in our introductory programming sequence, ITM 312, with a new course, *ITM 313 Introduction to Open Source Application Development*, to be taught in Python rather than C++.
 - a) The New Course Form has been submitted with a course description as follows:
 - i. **ITM 313 Introduction to Open Source Application Development**
Introduces basic concepts of systems programming using a modern open source language. Students learn to apply basic programming concepts toward solving problems, writing pseudocode, working with and effectively using basic data types, abstract data types, control structures, code modularization and arrays. They will learn to detect errors, work with variables and loops, and discover how functions, methods, and operators work with different data types. Students will be introduced to the object paradigm including classes, inheritance, and polymorphism. **Prerequisites:** None **Credit:** (2-2-3)
 - b) The Bulletin change shown below will allow *either* ITM 312 or ITM 313 but we do not expect offer ITM 312 on a regular basis. ITM 312 will remain in the bulletin and will be accepted as a transfer course.

Change:

ITM 312	Introduction to Systems Software Programming		3
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to read instead:

ITM 313 or ITM 312	Introduction to Open Source Application Development Introduction to Systems Software Programming		3
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4. Make the following changes to ITM undergraduate courses:
 - a) Add ITMD 421 as a prerequisite to *ITMO 444 Cloud Computing*. (submitted)
 - b) Change the course title of ITMT 492 from *Embedded Systems and Reconfigurable Logic Design* to *Introduction to Smart Technologies*. (submitted)
 - c) Change the *ITMD 462 Web Site Application Development* prerequisites to:
Prerequisite(s): ITM 311 and ITMD 361 and ITMD 421; and change the course description to read as follows:
 - i. This course is designed to primarily introduce PHP as a server-side programming language for building dynamic web pages and applications. Topics covered include PHP language syntax and usage, handling form data, current libraries and frameworks, web application security, development tools, application architecture, and database access. Other languages for server-side web development and the use of content management systems may be discussed. Students will design and create a web application that will allow for user login pages, as well as functionality to create, read, update, and delete database content through a web interface using web forms and basic database structure. (submitted with syllabus)
 - d) Change the *ITMD 465 Rich Internet Applications* prerequisites to: Prerequisite(s): ITM 311 and ITMD 361, and change the course description to read as follows:
 - i. Students learn to create interactive rich Internet applications using modern web development technologies, frameworks, and techniques to deliver robust applications that primarily operate on the client-side. The emphasis will be on developing client-side programs that run in a standards-based web browser without plugins. Some server and command line coding will also be explored. Topics covered may include the JavaScript language, HTML5 APIs, the Document Object Model (DOM), JavaScript libraries and frameworks, development tools, application architecture, and compile-to-JS languages. (submitted with syllabus)
 - e) Change the *ITMO 453 Open Source Server Administration* course description to read as follows:
 - i. Students learn the administration topics and concepts of IT Orchestration, Automation, Monitoring, and Metric Collection. Topics include configuring industry standard automation tooling and using scripting to achieve immutable infrastructure. Students will learn how to monitor and collect and present metrics in regards to the infrastructure they deploy. (submitted with syllabus)