

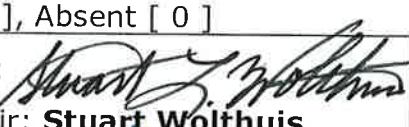
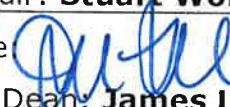

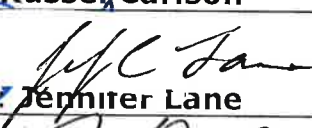

Section 1 - Approvals

Approvals

Name of Proposal: Intro to ^{Digital} Technology Minor and ^{Digital} Technology Minor

Submitted by: Joshua Smith Signature: _____

Date: April 10, 2017

Procedure	Recommendation/Signature	Date
Faculty Vote: For [7], Against [0], Abstain [0], Absent [0]		
1. Approved by Department	Signature:  Chair: Stuart Wolthuis	10 Apr 17
2. Approved by College	Signature:  Dean: James Lee	4/17/2017
3. Approved by General Education (if any GE course is affected)	Signature:  GE: Russel Carlson	4/14/17
4. Approved by University Curriculum Committee	Signature:  UCC: Jennifer Lane	4/24/17
5. Approved by Deans' Council	Signature:  AVP: John Bell	5/30/17
6. Approved by the President's Council (for new majors)	Signature: N/A Pres: John Tanner	

Section 2 – Overview (Support)

Summary:

- **Intro to Digital Technology Minor (12 credits)**
- **Digital Technology Minor (18 credits)**

Background

The CIS Department proposes an **Introduction to Digital Technology Minor** and a Department Technology Minor, both contained within the Professional purposes.

In 1995 less than 1% of the world population had Internet access; today it's nearly 50%. While it required approximately 40 years to reach the first billions users, only five years were needed to reach the second billion and three for the third billion [1]. Beyond merely connecting people, though, Gartner reports that 8.4 billion "things" will be network connected in 2017, which will exceed the human population, and 20.4 billion by 2020 [2]. This explosive growth has critical implications to all disciplines, economies, social structures, and governments.

The proposal intent is to prepare students with the basic knowledge and skills necessary to excel in today's digitally-connected world and to bring strong value to businesses in broad but non-specific employment sectors, such as government, education, health care, manufacturing, small business, retail, et al.

Intro Digital Technology Minor (12 credits)

These four courses provide students with basic knowledge and skills in several important technology areas: computer science (programming), web, networking, and security.

- **CIS 101: Beginning Programming (3) (FWS)**
Extensive hands-on software development and testing using variables, arrays, instruction sequences, decisions, loops, and subroutines. May also include dynamic web pages (CGI) and regular expressions.
- **IT 240: Fundamentals of Web Design and Technology (3) (FWS)**
Concepts of multimedia design and creation for the Internet using web programming tools to develop web pages.
- **IT 280: Computer Networking (3) (FWS)**
End-user fundamentals including local area networks, home networks, wireless networks, routers, firewalls, ports, address sharing, dynamic host configuration, OSI model, IPv4, netmasks, subnets, and troubleshooting. (FWS)
- **IT 481: Information Assurance and Security (3) (F)**
Introduction to information security providing a foundation of computer security concepts, including general security, communication security, infrastructure security, basics of cryptography, and operational and organizational security. (IT 280)

Digital Technology Minor (18 credits)

The certificate will consist of the ***Intro to Digital Technology Minor*** foundation and six additional credit hours of coursework from the CIS Department, of which three credits must be level 300-499 from the IT program. Students still must fulfill pre-requisites for selected courses, if any.

Anticipated Changes in Graduation Requirements

There are no anticipated changes in graduation requirements with the proposals.

Changes in Expected Teaching Load

N/A – No new course is needed for this proposal

[1] Internet Live Stats, February 20, 2017. <http://www.internetlivestats.com/internet-users/>

[2] Gartner Press Release, February 7, 2017. <http://www.gartner.com/newsroom/id/3598917>

Section 3 - Program Revision Proposal

Upon approval, the information presented on this course proposal sheet will become binding on the department and the university. Any material changes require a new program proposal.

Effective Date: Fall 2017

College: Business, Computing & Government

Abbreviation: MIDIGTECH and MIINTRO-DIGTECH

See attached MRS' for:

MIDIGTECH – Digital Technology Minor

MIINTRO-DIGTECH – Introduction to Digital Technology Minor



**Introduction to
Digital Technology
Minor**
MIINTRO-DIGTECH
12 credits (mrs)

Effective Date: 09/2017

Name of Student:		
Student ID #:		Graduation Date
Home Country:	<input type="checkbox"/> IWORK	
Advisor:	Name	Date

Required Coursework

12 Credits

<i>Course #</i>	<i>Title</i>	<i>Hr.</i>	<i>Prerequisites</i>	<i>Offered</i>	<i>Sem.</i>	<i>Grade</i>
CIS 101	Beginning Programming	3		F,W,S		
IT 240	Fundamentals of Web Design & Technology	3		F,W,S		
IT 280	Computer Networking	3		F,W,S		
IT 481	Information Assurance and Security	3	IT 280	F		

Total Credits Mapped for Graduation:

All passing grades will be accepted in fulfilling minor or certificate requirements.



**Digital Technology
Minor**
MIDIGTECH (mrs)
18 credits

Effective Date: 09/2017

Name of Student:		
Student ID #:		Graduation Date
Home Country:	<input type="checkbox"/> IWORK	
Advisor:	Name	Date

Required Coursework	12 Credits
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Course #	Title	Hr.	Prerequisites	Offered	Sem.	Grade
CIS 101	Beginning Programming	3		F,W,S		
IT 240	Fundamentals of Web Design & Technology	3		F,W,S		
IT 280	Computer Networking	3		F,W,S		
IT 481	Information Assurance and Security	3	IT 280	F		

Elective Coursework

6 Credits

An additional 6 credit hours of coursework in CIS disciplines (including any necessary prerequisite courses); three credits must be IT level 300-499.

Total Credits Mapped for Graduation:

All passing grades will be accepted in fulfilling minor or certificate requirements.

Sample MAP for Intro to Digital Technology Minor

Spring: CIS 101, IT 280

Fall: IT 240, IT 481

Total Classes: 4

Total Semester: 2

Total Credits: 12

Sample MAP for Digital Technology Minor

Spring: CIS 101, IT 280

Fall: IT 240, IT 481

Winter: Six credits CIS courses (one must be IT 300-499)

Total Classes: 6+

Total Semester: 3

Total Credits: 18