**Information Technology Advisory Meeting**

Fall 2017 Meeting Date

September 27th @ 6:00 in room B150 adjourned at 7:50

Minutes Taken By: Dave Hjalmquist

**Attending**

Tim Preuss – M State Instructor

Deb Flaskerud – M State Instructor

Dave Hjalmquist – M State Instructor

Joanna Jesser – M State Instructor

Janet Johnson – M State Instructor

Dan Carter – M State Instructor

James Anderson – City of West Fargo & Chairperson

Carrie Scarr – City of West Fargo

Bruce Curtis - NDSU

Greg Dupree – Cass County Electric

Travis Durick – Simplify IT

Andy Haugen – John Deere

Jason Peterson – AFBIS

Barry Seidel – Otter Tail Power

John Tassava – Border States

**Agenda for fall 2017**

* MSCTC/M State welcome
* Introductions
* Review/Revision/Approval of last meetings minutes
* Membership list additions and/or removals
  + The time has come to begin adding to the invitation list.
* WebEx procedure – virtual attendees
* Curriculum
  + Update Computer Programming – AAS degree
    - <http://brazil.minnesota.edu/curr/CP_AAS_2017.pdf>
    - This is a review of the current curriculum.
  + Update Information Technology – Database Administration – AAS degree
    - <http://brazil.minnesota.edu/curr/IT_database_fall2017.pdf>
    - This is a review of the newly adopted curriculum.
  + Update Network Administration & Security – AAS degree
    - <http://brazil.minnesota.edu/curr/nat_aas_fall2017.pdf>
    - This is a review of the newly adopted curriculum.
  + Update Network Administration & Security – Certificate
    - <http://brazil.minnesota.edu/curr/netsec_certificate_fall2015.pdf>
    - The faculty request the opinion of the advisory board about this certificate program.
  + Update Information Technology – AS
    - <http://brazil.minnesota.edu/curr/IT_AS_fall2017.pdf>
    - This is a review of the newly adopted curriculum
* Donation
  + This is a discussion about donations to M State.
* Internships
  + This is a call for Internships and entry-level job opportunities for M State students.
* Discussion: Identify current and future trends/technologies
  + What technology/concepts must students master before graduation?
  + What technology/concepts should students master before graduation?
  + What technology/concepts are no longer necessary for student mastery before graduation?
  + The following are curriculum standards used in curriculum design.
    - <http://ccecc.acm.org/files/publications/ACMITCompetencyModel14October201420150114T180322.pdf>
    - <http://ccecc.acm.org/guidance/software-engineering/objectives/>
* Other Notes

Advisory Member Functions (MSCTC Advisory Committee Guide)

* Identify specific subject areas of program inclusion
* Prioritizing the recommend subject areas
* Specifying appropriate program content level
* Reviewing program outcomes on an ongoing basis
* Assessment of program quality
* Specifying appropriate foundational skill standards for local needs
* Identifying general education and related technical skills needed by graduates
* Recommending equipment to support the program content

**Discussion**

James welcomed everyone and we did introductions

Joanna Jesser moved and Greg Dupree 2nd a motion to approve the minutes from the Spring 2017 Advisory Board meeting, motion carried

Deb said Computer Programming students will taking Python in the first semester as in fits both Computer Programming and IT programs.

Deb said the Database Administration program has started and a few students are enrolled.

Deb discussed the classes needed for the Database Administration degree and how many classes were new and how many are cored with other programs.

Tim explained the Network Administration & Security program and group discussion followed.

Tim talked about why Robotics was used in the Information Technology program.

Jason said the Robotics class would help with different learning styles.

Tim explained the Network Security certificate program and the classes involved in the program.

Jason asked if the Network Security certificate would benefit students who had already graduated from another IT program.

John asked how many students were in the Network Security certificate program. Janet replied two right now.

John wonder that there is too much network based classes and not any application security.

Janet suggested that the Network Security certificate program should have a programming language such as Intro to Programming and Scripting.

John said companies are taking existing staff and getting them more involved in the security end.

There was group discussion on all areas and classes of the Network Security certificate program.

Tim talked about the Cisco certificate and the four Cisco classes.

James talked about employers paying for employees to take classes and the students being told how they could find a different job and the employers wouldn’t be happy about that.

Tim asked about corporate certificates and John said go the more generic way.

Tim talked about what IT equipment he would like donated to M State and what equipment we currently have for the students to work on. Members and other interested in donations should contact Tim for more information.

Tim said we are always looking for internships. John said Border States will have one coming up.

What must students master before they graduate?

The group did not generate a list of required skills before graduation. One member did encourage the Linux classes. The group did list other necessary skills. Security continues to be important with an increasing emphasis on application security. The consensus seems that Docker is worth education time. Internet of Things (IoT) and power over Ethernet is a growing concern for members of the group.

What should students master before they graduate?

The group did not delineate between should and must learn before graduation at this meeting.

What is no longer necessary for students to master before graduation?

This is the hardest question for faculty and the advisory group. At the meeting, the closest to removing anything is more emphasis on application security and reducing the emphasis on network security.

Jason Peterson moved and John Tassava 2nd a motion to adjourn the meeting, motion carried.