Graduate Faculty Council Agenda  
November 6, 2018

Members Present: Will Cantrell (Atmo Sci), Taur Dam (BMB), Ebenezer Tumban (Bio Sci), Feng Zhao (Biomed), Mari Buche (Bus and Data Sci), Becky Ong (Chem Eng), Shiyue Fang, (Chem), Veronica Webster (Civ Env Eng), Ben Ong (Data Sci), Mike Roggemann (Ele Comp Eng), Leonard Bohmann (MS Eng), Qiuying Sha (Math), Cragi Friedrich (MEEM), Kari Henquinet (PCorps), Yoke Khin Yap (Physics), Eugene Levin (Sc of Tech), Chelsea Schelly (Soc Sci)

Members Absent: Joel Tuoriniemi (Acct), Kelly Steelman (App Cog Sci), Gary Campbell (App Nat Res), Warren Perger (Comp Sci & Eng), Jean Mayo (Comp Sci), Alex Mayer (Env eng), Ann Maclean (SFRES), Chad Deering (Geo Min Eng & Sci), Ramon Fonkoue (Humanities), Steve Elmer (KIP), Stephen Hackney (MSE),

Guests Present: Soonkwan Hong (SchofBus), Faith Morrison (Grad Sch), Jacque Smith (Grad Sch), Mary Stevens (Grad Sch), Deb Charlesworth (Grad Sch), Erin Matas (Library), Apurva Baruah (GSG), Erin Matas (Lib)

Approval of October 9, 2018 minutes
The October 9 minutes passed on a voice vote with no discussion.

Business before the University Senate (V. Webster)
The Senate Research Policy committee proposed the Expanded Endowment for Graduate Support at the October 24 meeting.

Old Business
Proposals to shelve four programs: (F. Morrison)
Four unused PhD programs were brought forward by the Graduate School for shelving. Students in these topics have other degrees available to them.
- EPD1 Engineering Structural Engineering
- EPD3 Engineering Geotechnical Engineering
- EPD4 Engineering: Sensing and Signal Processing
- EPD6 Propulsion Systems Engineering
The motion to shelve the four programs was voted on and approved by the council.

New Business
Shelving of inactive nondepartmental masters of engineering degrees (F. Morrison)
Two unused masters programs were brought forward by the Graduate School. Students interested in these topics have other degrees available to them.
- EGR3 Master of Engineering Civil Engineering
  (no enrollments since 2012)
The motion to shelve the four programs was voted on and approved by the council.

Proposal for New Graduate Degree “Masters in Engineering Management (MEM)” (S. Hong)
The School of Business and Economics is proposing the new MEM graduate degree program. This proposal is a technical/business (hybrid) degree program that focuses on the managerial knowledge, skills, and abilities critical for operations management success within technical industries.

The Bureau of Labor does not track careers in this field because it is fairly new; however, a similar field is growing at a fast rate and is expected continued growth of 10% over the next ten years. The School of Business anticipates a high job placement rate for MEM graduates.

Students will be required to fulfill 30 credit hours. There are five required business courses. Based on the student’s undergraduate background or interest, the Focused Electives allow students to choose 6 credits in business or engineering related areas and the other nine credits are technical electives.

The following comments and questions were discussed:

- Include specific prerequisite requirements. The program requires successful completion (with a grade of C or better) of Statistics (included in the proposal). Individual course prerequisites will need to be addressed by the students when selecting classes.
- Establish a technical path for non-Michigan Tech engineering undergraduates, example systems or industrial engineering focused courses. This program is specifically designed to provide opportunities to Michigan Tech undergraduates. At this point, such an attempt will likely obscure the initial intent and the overall curriculum management. However, the future direction of the program will not exclude the opportunity.
- Offer the program online. Due to pedagogical, instructional, and technical difficulties and conflicts, online offering is not a plausible option at this time; however, the school is currently looking into other hybrid delivery methods, such as synchronous classroom technology.
- Selected courses carefully to meet expectations. Evaluate a program is meeting its goals, it must be in the rules, Senate proposal. Essential feature. The curriculum and courses will sufficiently serve the purpose (see Section 4).
- Include language how this proposal is distinct from the MBA program. To summarize the information included in the proposal (Section 4 and 7), the MBA is focused on general management concepts and knowledge creation. In contrast, the MEM is a specialized master’s degree that integrates management and technical domains at a deeper level. This hybrid approach creates a carefully formulated core of vital business management courses designed to benefit a unique graduate skill set that is in high demand in industry.
- Include language that the proposal meets AACSB’s and HLC’s requirements. Newly added to the proposal based on the text suggested by Dr. Morrison.
- Is there any thought about expanding the program beyond engineering? Example: health science or science management. The coverage of the program is expected to grow, and the school will continuously seek new opportunities for a broader student population.
The department will review these issues further and this will be brought back for further discussion and vote.

**Update**

**Independence of committees report (W. Cantrell)**

The ad hoc committee met on October 22 and made the following recommendation:
1. Declare to the committee if two people are in a domestic relationship, are siblings, are a parent and child, or are married.
2. People in such relationships should be the minority on the committee to protect the students. Adding members to the student’s committee was felt to balance protection for the student while not unduly burdening faculty.

The University of British Columbia handout focuses on the evaluation and not on the committee.

The following comments and questions were discussed:

- If one or two members are from an external department, can that person serve as a sole external committee member?
- Problems sometimes start before the committee is constituted.
- There is a concern for smaller departments being burdened.
- When is the committee constituted and how to keep check on issues or problems that could arise during a student’s second or third year? The Graduate School provides guidance on the student’s My Michigan Tech account on when the committee is considered overdue, however, some students are told by their advisors to not appoint a committee early.

Email Will if you have any additional thoughts. The committee will review these issues further and this will be brought back for further discussion.

**Adjourned 5:00 pm**