Graduate Faculty Council Minutes
October 9, 2018

Members Present: Joel Turoniemi (Acct), Kelly Steelman (Cog Sci), Will Cantrell (Atmo Sci), Taurn Dam (BMB), Ebenezer Tumban (Bio Sci), Feng Zhao (Biomed), Mari Buche (Bus and Data Sci), Becky Ong (Chem Eng), Shiuyue Fang, (Chem), Veronica Webster (Civ Env Eng), Ben Ong (Data Sci), Mike Roggemann (Ele Comp Eng), Ann Maclean (SFRES), Ramon Fonkoue (Humanities), Qiuying Sha (Math), Yoke Khin Yap (Physics), Eugene Levin (Sc of Tech), Chelsea Schelly (Soc Sci)

Guests Present: Faith Morrison (Grad Sch), Mary Stevens (Grad Sch), Deb Charlesworth (Grad Sch), Erin Matas (Library), Apurva Baruah (GSG)

Approval of September 25, 2018 minutes
The September 25 minutes passed on a voice vote with no discussion.

Business before the University Senate (V. Webster)
The Senate Research Policy Committee will propose a topic on October 24 pertaining to graduate students. Veronica will attend the October 24 meeting.

Old Business
GFC liaison to University Senate (F. Morrison)
Morrison reported that Pat Heiden will be a liaison from the Senate to GFC. No volunteers stepped forward to be a liaison to the Senate. GFC chair V. Webster will attend when able and will request a volunteer to attend Senate meetings when she cannot.

Graduate Program Review – A1, B1, and B2 processes (update) (F. Morrison)
The Graduate Program Review process has three parts, A, B1, and B2. During part A, each academic program submits to the Graduate School their student outcome assessment results report (the green, 2-page report; one for each degree program) each October 1. Graduate program data (different from student outcomes data) from the Graduate School is provided to programs for the B1 internal review. At steady state, internal review reports are submitted to the Graduate School every twelve years. The B2 external review will take place every twelve years. The B1 and the B2 are six years apart.

The A process started in academic year 2015-16, and the Graduate School has received 51 out of 71 annual student assessment reports. Once the remainder of the reports are submitted, Morrison and W. Cantrell (and possibly the GRIP team, Graduate Review and Improvement Processes, part of the HLC Assessment Academy) will review the reports. Programs are asked to please keep assessment programs on schedule and to take the data described in the A plan and use the data for continuous improvement.

The B1 process also started in academic year 2015-16 with four groups, followed by four groups each during academic years 2016-17 and 2017-18. The College of Engineering is currently undergoing eight B1 internal reviews. These groups will submit a draft B1 report to the Graduate School by the end of this semester and a final report in January.
Programs will go through the external review (B2) process six years after the internal review (B1). However, most programs are currently going through both the B1 process and also prepping for the B2 visit, allowing us to catch up to Higher Learning Commission (HLC) expectations (we are operating under an accreditation “concern”). The Graduate School and the Provost’s Office set up a detailed checklist of the steps of who needs to do what, when and where to send documentation, and who approves.

Improvements are being made to the B2 process after lessons learned from the Humanities and the School of Forestry external reviews (B2). KIP and Biological Science completed their B2 external reviews last week and this week. Biomedical Engineering, Civil and Environmental Engineering, Environmental Engineering (EPD2), Electrical and Computer Engineering, Computational Science and Engineering (EPD5), Data Science, and Material Science and Engineering will undergo their B2 external reviews next year.

The program reviews and student outcome assessment programs will be on a regular schedule going forward and that has been addressed in our HLC interim report last July. We should hear a response on that interim report in a few weeks. We will be doing a comprehensive HLC review in 2021-22.

Ensuring independent opinions on graduate student advisory committees (update) (W. Cantrell)
The Graduate School requested an ad hoc committee be formed to make a recommendation to GFC on ensuring that graduate students have independent opinions and oversight from members of their dissertation committees. The main concern and question is, can two people who are on the same student’s committee that are in a close personal relationship, give independent advice on the student’s performance. The committee will meet October 22 and will report back to GFC at the next meeting.

Volunteers on the committee include:
- Will Cantrell, Graduate School
- Veronica Webster, GFC
- Qiuying Sha, GFC
- Two graduate student representatives

New Business
Dual IGT Degree Agreement with Kiev National University of Construction and Architecture, Ukraine (KNUCA) (E. Levin)

Levin introduced Roman Shults, Visiting Professor at Michigan Tech and Dean at KNUCA to discuss a new proposed agreement between KNUCA and Michigan Tech. The objective of this agreement is to promote academic exchanges of fully funded KNUCA students to Michigan Tech Integrated Geospatial Technology Master Program.

Students admitted to Michigan Tech will be self-funded, must have acquired at least 15 credits from KNUCA prior to enrolling, and earn at least 15 credits at Michigan Tech. Approximately five to ten KNUCA students will attend Michigan Tech each year. After successfully completing the program, students will receive two degrees, one in
Geodesy and Land Management from KNUCA and one in Integrated Geospatial Technology from Michigan Tech.

Jacque Smith of the Graduate School met with Dr. Levin on October 18. The discussion included an alternative way in which the Michigan Tech-KNUCA collaboration could function. Specifically, agreement on counting 6 undergraduate credits based on senior rule and up to 10 graduate credits towards IGT degree may work as a Phase 1 of the proposed collaborative effort. That agreement may be established immediately with simplified approval process and the first cohort of graduate students from KNUCA can come in fall 2019. That Phase 1 implementation procedure was accepted by Dr. Shults and approved by School of Technology Dean.

The dual-degree agreement will be formally proposed to the GFC in the future as a Phase 2 when we will be able to see student numbers and their quality.

**Individual Development Plan (IDP) rollout (D. Charlesworth)**
The Graduate School created an IDP template for student career development. This template is flexible and users can add and/or delete questions to best meet the needs of the student’s discipline. We are rolling the IDP out to campus with a number of activities and the template web site is available for use and to share with students: https://www.mtu.edu/gradschool/resources-for/students/professional/idp/. Departments are encouraged to share additional resources with the Graduate School to be included on the web site.

The Graduate School will also test the template with a pilot group to further evaluate the form and on November 7, Drs. Schlatterer and Kuniyoshi, from the American Chemical Society will talk about how students and faculty can use IDPs. The seminar will be advertised in Tech Today, there will also be seminar posters, and e-mails will be sent about the events.

**Proposals to shelve four programs: (F. Morrison)**
The Graduate School is requesting to shelve the following programs as part of the HLC program evaluation requirements and due to the lack of enrollment and lack of activity in general. The council will vote on the topic at the November meeting.

- EPD1 Engineering Structural Engineering - 4 students graduated early 90’s
- EPD3 Engineering Geotechnical Engineering - 6 graduated late 80s early 90s
- EPD4 Engineering: Sensing and Signal Processing - 7 graduated late 80s early 90s
- EPD6 Propulsion Systems Engineering - no degree awarded

**Motion to adjourn: 4:50 pm**
Graduate Faculty Council Agenda
October 9, 2018

Approval of September 25, 2018 minutes (2 min)

Business before the University Senate (V. Webster) (2 min)

Old Business
  • GFC liaison to University Senate (F. Morrison) (5 min)
    o Action item: identify volunteer
  • Graduate Program Review – A1, B1, and B2 processes (update). (F. Morrison) (15 min)
  • Ensuring independent opinions on graduate student advisory committees (update) (W. Cantrell) (5 min)

New Business
  • Dual IGT Degree Agreement with Kiev National University of Civil Engineering and Architecture, Ukraine (E. Levin) (15 min)
  • Individual Development Plan (IDP) rollout (D. Charlesworth) (10 min)
  • Proposals to shelve four programs: (F. Morrison) (15 min)
    o EPD1 Engineering Structural Engineering
    o EPD3 Engineering Geotechnical Engineering
    o EPD4 Engineering: Sensing and Signal Processing
    o EPD6 Propulsion Systems Engineering
Individual Development Plans for Research Graduate Students

Background
The National Academies and funding agencies are encouraging faculty advisors to engage in student-centered mentoring for graduate students and postdoctoral fellows to prepare them for a wider variety of careers. One tool that can be used to assist with student-centered mentoring is called an individual development plan (IDP). As part of an NSF funded project\(^1\), faculty at Michigan Tech have created and piloted an IDP with a small group of students. The IDP has been refined based on feedback from the pilot group and GFC. The Graduate School is launching this IDP to the campus with a number of activities this year.

IDP Launch Activities
- A new web site with links to the Michigan Tech IDP and other examples. http://www.mtu.edu/gradschool/resources-for/students/professional/idp/
- A larger pilot group will be formed to further evaluate the effectiveness of the IDP.
  - Biological Sciences, Biomedical Engineering, Forest Resources and Environmental Science, Kinesiology and Integrative Physiology, ME-EM (PhD)
- Dr. Joerg Schlatterer and Dr. Corrie Kuniyoshi from the American Chemical Society will present on IDP usage (The pilot group will be invited first; open to all campus after that. Additional details below and will be available as a flyer soon.).
- Tech Today articles to advertise the availability and importance of IDPs (forthcoming)

Seminar Announcement
Planning for Your Career (open to graduate students and postdoctoral fellows)
Wednesday, November 7 | 10-11:30am | Alumni Lounge MUB

Workshop participants will learn about the four critical components of career development and planning, how they can relate to their individual situation, and finding their career “sweet spot”. Participants will be introduced to the Individual Development Plan (IDP) concept and how IDPs can help set clear goals toward a desired career path. As an example for online IDPs, the ACS tool ChemIDP™ (ChemIDP.org) will be introduced.

Individual Development Plan Assisted Mentoring (A workshop for faculty advisors)
Wednesday, November 7 | 3:00-4:00pm | Alumni Lounge MUB

This 1 hour interactive workshop will introduce the IDP process as a mentoring tool and share related resources available to advisors. The IDP process consists of four components: 1) self-assessment, 2) career exploration, 3) skill strengthening, and 4) goal setting. ChemIDP™, the IDP tool and workshop developed by the ACS for trainees in the chemical sciences, will serve as an example of how use of IDPs has the potential to prepare faculty and trainees for efficient mentor-mentee discussions.

\(^1\) Award #1305678, “The Michigan AGEP Alliance for Transformation (MAA): Mentoring and Community Building to Accelerate Successful Progression into the Professoriate”

GFC – 10/9/2018
Proposal XX-19

Proposal to Shelve the Nondepartmental PhD in Engineering Structural Engineering (EPD1)

Submitted by: Graduate School
Contact: Pushpa Murthy, Dean of the Graduate School
Faith Morrison, Associate Dean of the Graduate School
Will Cantrell, Associate Dean of the Graduate School
Debra Charlesworth, Assistant Dean of the Graduate School

1. Full name of program to be shelved
   Nondepartmental PhD in Engineering Structural Engineering (EPD1)

2. Final term program will be open for new admits
   Fall 2018

3. Plan to complete all enrolled and returning students
   No one has enrolled since at least Spring 2011.

4. Reason for shelving
   The current degree offerings are meeting the demand for engineering PhDs and there is no evidence of demand for this degree.

5. Financial impact (if any) to the department and university
   None. The program is not active.

Approved by Graduate Faculty Council: 06 November 2018 (proposed)
Introduced to Senate: xx December 2018
Approved by Senate: xx December 2018
Approved by Administration: xx December 2018
Proposal XX-19

Proposal to Shelve the Nondepartmental PhD in Engineering Geotechnical Engineering (EPD3)

Submitted by: Graduate School
Contact: Pushpa Murthy, Dean of the Graduate School
        Faith Morrison, Associate Dean of the Graduate School
        Will Cantrell, Associate Dean of the Graduate School
        Debra Charlesworth, Assistant Dean of the Graduate School

1. Full name of program to be shelved
   Nondepartmental PhD in Engineering Geotechnical Engineering (EPD3)

2. Final term program will be open for new admits
   Fall 2018

3. Plan to complete all enrolled and returning students
   No one has enrolled since at least Spring 2011.

4. Reason for shelving
   The current degree offerings are meeting the demand for engineering PhDs and there is no evidence of demand for this degree.

5. Financial impact (if any) to the department and university
   None. The program is not active.

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Approved by Administration: xx December 2018
Proposal XX-19

Proposal to Shelve the Nondepartmental PhD in Engineering Sensing and Signal Processing (EPD4)

Submitted by: Graduate School
Contact: Pushpa Murthy, Dean of the Graduate School
         Faith Morrison, Associate Dean of the Graduate School
         Will Cantrell, Associate Dean of the Graduate School
         Debra Charlesworth, Assistant Dean of the Graduate School

1. Full name of program to be shelved
   Nondepartmental PhD in Engineering Sensing and Signal Processing (EPD4)

2. Final term program will be open for new admits
   Fall 2018

3. Plan to complete all enrolled and returning students
   No one has enrolled since at least Spring 2011.

4. Reason for shelving
   The current degree offerings are meeting the demand for engineering PhDs and there is no evidence of demand for this degree.

5. Financial impact (if any) to the department and university
   None. The program is not active.

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Approved by Administration: xx December 2018
The University Senate of Michigan Technological University

Proposal XX-19

Proposal to Shelve the Nondepartmental PhD in Propulsion Systems Engineering (EPD6)

Submitted by: Graduate School
Contact: Pushpa Murthy, Dean of the Graduate School
Faith Morrison, Associate Dean of the Graduate School
Will Cantrell, Associate Dean of the Graduate School
Debra Charlesworth, Assistant Dean of the Graduate School

1. Full name of program to be shelved
   Nondepartmental PhD in Propulsion Systems Engineering (EPD6)

2. Final term program will be open for new admits
   Fall 2018

3. Plan to complete all enrolled and returning students
   No one has enrolled since at least Spring 2011.

4. Reason for shelving
   The current degree offerings are meeting the demand for engineering PhDs and there is no evidence of demand for this degree.

5. Financial impact (if any) to the department and university
   None. The program is not active.

Approved by Graduate Faculty Council: 06 November 2018 (proposed)
Introduced to Senate: xx December 2018
Approved by Senate: xx December 2018
Approved by Administration: xx December 2018