

**The University Senate
of Michigan Technological University**

Minutes of Meeting 511
19 October 2011

Synopsis:

The Senate

- Presentation of Provost Max Seel

1. Call to order and roll call. President Rudy Luck called the University Senate Meeting 511 to order at 5:30 pm on Wednesday, October 19, 2011. The Senate Secretary Marty Thompson called roll. Absent were representatives of Army/Air Force ROTC, Biomedical Engineering, Materials Science and Engineering, Mathematical Sciences, Physics, Auxiliaries and Cultural Enrichment, IT and Staff Council and Senators Caneba and Koszykowski.

2. Recognition of visitors. Guests included Max Seel (Provost Office), Pushpa Murthy (Chemistry), Keat Ghee Ong (Biomedical Engineering), Ashitosh Tiwari (Chemistry) and Sean Kirkpatrick (Biomedical Engineering).

3. Approval of agenda. Luck asked if there were any changes; there being none Luck declared the agenda stood **approved**.

4. Approval of minutes from Meetings 510. Luck asked if there were any changes; Rudiger requested a correction, which was implemented. Scarlett **moved** to approve the minutes as amended; Barr **seconded**; the minutes were **approved** by a voice vote.

5. Presentation: [“2035 Vision and Enrollment Target Discussion”](#) by Provost Max Seel

Luck introduced Provost Max Seel, who proceeded to provide a portrait of Michigan Tech in the year 2035 and the discussions that led to this vision. He noted the stark contrast in the number of engineering degrees awarded nationally versus those for Michigan Tech. Luck asked why Tech had different numbers of graduate students than other engineering schools and if he expected the increase in PhD degrees in 2035 would be in areas other than engineering. Seel said he did not know what the exact numbers would be for different disciplines in 2035, but that we need to move towards the national average. He proceeded to explain the changes taking place in faculty hiring to support the increased numbers of graduate students. Seel said the 2035 portrait is to guide the discussion. He did not think we will shift to an online university but will remain a residential institution and a research university. He discussed a survey of industry response to hiring BS and MS engineering graduates and suggested Tech should make the necessary adjustments to meet the changing needs of industry. Seel described the changes in the educational timeline for engineering degrees as compared with other disciplines and professional degrees. Vable asked why the number 3000 was chosen for the number of graduate students in 2035. Seel was not clear on why that number was chosen, specifically, except as a goal, and noted it could be more or less. Vable asked why there were endowments for faculty but none for graduate or undergraduate students. Seel stated that \$400 million for the endowment is needed. Vable said it was only cited for faculty and the use of the endowment should be made clear. Seel said the uses for the endowment is under discussion and the current document is a draft. Bulleit noted the goal for 40% endowed faculty positions, but it was not clear about the total number of faculty this involved or if these were tenure or tenure track. He asked how many faculty a \$400 million endowment would provide for. Seel was not clear, stating that such details are still being discussed and that he would appreciate feedback. Bulleit asked if we would meet the endowment goal of \$120 million set for FY2016 noting we are roughly at about \$70 million. He asked stated the fundraising expectations and asked if this goal of \$400 million is overreaching. Riehl asked he is concerned about losing students who get an undergraduate degree here and taking a master's degree somewhere else. Seel says we need to stay consistent with national trends and noted there is no inherent need for graduate classes to be smaller in size. Riehl asked if students transfer from Tech because of a lack of such program. Seel said that if we do not offer the programs students want, then students may leave or may not come here. Bulleit noticed there is a move towards professional master's degrees in various fields and asked if there has been discussion of applying this to science fields. Seel affirmed there are several examples of this. Luck inquired about the new infrastructure requirements to realize the 2035 portrait of Tech. Seel said this discussion of infrastructure changes is needed to support the 2035 vision. Onder asked about the percent distribution of Ph.D. and M.S. students. Seel restated the numbers but noted that these numbers could change in 25 years. Onder noted the different requirements between master's and doctoral students. Seel affirmed the differences. Murthy asked about the female enrollment projections. Seel said the current female enrollment is the highest ever. He noted 83% disciplines are STEM, which typically have a low percentage of female students, noting the 2020 projection is 30% female students overall. Luck thanked Seel.

6. Report from the Senate President

Luck provided an update on the proposals passed during the last senate meeting. Seel elaborated on the administrative progress of these proposals. Luck said Vice-President Reed will present a discussion on the strategic plan and strategic budgeting in the Chemical Sciences and Engineering building on Nov. 9 at 5 pm. Scarlett asked the purpose of the exercise. Luck said that Reed could better answer this question, but felt it would be useful to understand the financial aspects of different programs. Scarlett asked if this was open to all constituents or just senators. Luck affirmed the invitation was only extended to the senate.

7. Report from Senate Standing Committees

None.

8. Old Business

None.

9. New Business

Proposal 6-12 : “Proposal for a non-departmental Ph.D. Program in Biochemistry and Molecular Biology (BMB)”

Storer, Curricular Policy Committee, noted this involves the School of Forestry Resources and Environmental Sciences and the Departments of Chemistry, Biomedical Engineering and Biological Sciences. He said this program fills a gap in the curriculum. Luck reminded everyone that the proposal is being introduced and to discuss this with constituents. Storer noted that the Finance Committee (FC) has reviewed this. Herbig, FC, noted several points of clarification and have not heard back yet. Murthy noted that Mullins, FC chair, sought minor clarifications, which were addressed directly. Storer affirmed this.

Proposal 7-12: ““Master’s Program in Biomedical Engineering”

Storer, Curricular Policy Committee, noted there is currently a doctoral program in the Department of Biomedical Engineering and this master’s degree is a logical addition. He provided two friendly amendments. Luck noted that these amendments will be updated on the website. He noted the Finance Committee chair approved both of the current proposals and provided the open meeting date for the FC.

10. Adjournment. Ounder **moved** to adjourn; Storer **seconded** the motion. President Luck adjourned the meeting at 6:13pm

Respectfully submitted
by Marty Thompson
Secretary of the University Senate