The University Senate of Michigan Technological University

PROPOSAL 20-09

"List of All Academic Programs"

(Voting Units: Academic)

The Office of the Provost will maintain the list of academic programs offered by the University. This Office will review and, where necessary, update this list once per year.

Note: The attached document is a part of this proposal, and lists the academic programs currently offered by the university. The document provides a description of the assembling of the listing.
Degrees

- Those degrees with ‘c’ after the year are from Registrars list of degrees conferred found in vault 2/8/08
- All final approval dates for degrees confirmed with Board of Control Index of Meeting Minutes; minor and undergraduate certificates administrative approval date; graduate certificates final state approval date.
- ‘a’ after date indicates information from BOC Proceedings Abstract 1935, Annette Sibilsky, 5é Floor Admin vault
- ‘s’ indicates Senate approval date (where no other date available).

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/06/1941</td>
<td>Graduate degree requirements are codified by BOC</td>
</tr>
<tr>
<td>07/06/1950</td>
<td>Graduate School and Grad Faculty Council officially created by BOC</td>
</tr>
</tbody>
</table>

**Ph.D Degrees**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/3/1932²</td>
<td>Ph.D. requirements listed</td>
</tr>
<tr>
<td>1934³</td>
<td>Metallurgy (not listed in catalog offerings; not in BOC minutes; however, degree</td>
</tr>
</tbody>
</table>
conferred to Roy Ward Drier and Corbin T. Eddy in 1934)

05/06/1955 approved future Ph.D. offerings by departments-determined by President

Unsuspended after not offering for ‘many’ years:

02/15/1963 Chemistry
02/15/1963 Engineering Mechanics
02/15/1963 Geology
02/15/1963 Metallurgical Engineering
08/25/1972 Biological Science
02/15/1974 Mechanical Engineering-Engineering Mechanics
01/18/1985 Engineering
01/18/1985 Engineering: Environmental Engineering
03/27/1985\textsuperscript{6} Engineering: Structural Engineering (S=Date of Senate approval, appd by admin but no date)
05/14/1985 Engineering: Sensing and Signal Processing Ph.D.
05/14/1985 Engineering: Geotechnical Engineering, Ph.D.
05/22/1987 Forest Science
11/20/1987 Applied Physics
11/15/1990 Rhetoric and Technical Communication
03/22/1991 Chemical Engineering
03/22/1991 Civil Engineering
03/22/1991 Electrical Engineering
03/22/1991 Mining Engineering
06/12/1994 Computational Science & Engineering within the PhD in Engineering
00/22/1995 Geological Engineering
07/30/1996 Mathematical Sciences
05/26/2000 Non-Departmental PhD in Propulsion Systems Engineering
03/09/2001 Computer Science
03/09/2001 Forest Molecular Genetics and Biotechnology
05/11/2001 Biotechnology
12/14/2001 Engineering Physics
06/25/2004 Industrial Heritage and Archaeology
06/24/2005 Engineering-Biomedical Engineering
05/04/2007 Ph.D. Atmospheric Science
Masters Degrees

02/13/1965 Biological Sciences
11/22/1985 Rhetoric and Technical Communication
06/30/1996 Environmental Policy
09/18/1998 Master of Engineering
12/14/2001 Science
02/08/2001 Applied Science Education
06/25/2004 Master of Engineering-Civil Engineering
06/25/2004 Master of Engineering-Environmental Engineering
06/25/2004 Forestry
06/22/2006 MBA Master of Business Administration

Masters of Science Degrees

12/16/1926a M.S. General Engineering  *(this may be permission for all engineering Degrees as many were conferred from 1930-54 but found no specific BOC approval)*
12/16/1926a M.S. Metallurgy
12/16/1926a M.S. Chemistry
12/16/1926a M.S. Geology
12/16/1926a M.S. Mechanical Engineering
1930c M.S. Electrical Engineering
1931c M.S. Geophysics
1931c M.S. Mining
1932c M.S. Civil Engineering
1933c M.S. Chemical Engineering
1942c M.S. Geological Engineering
1946c M.S. Metallurgical Engineering
1947c M.S. Mining Engineering
1950c M.S. Engineering Physics
1954c M.S. Physics
01/31/1959 M.S. Engineering Mechanics
02/10/1962  M.S. Mathematics
02/10/1962  M.S. Business Administration
01/31/1959-69  Nuclear Engineering (*end date from Tech Topics online 2/9/1996 -does show in Senate minutes as an announcement not a vote– President of University announced its end due to costs*)
02/13/1965  M.S. Biological Sciences
03/17/1980  Computer Science (dates from Senate proposal 4-80
10/12/1973  Science Majors and Science Education (state) Minors in Teacher Education
03/25/1983  Mineral Economics
03/25/1983  Operations Management
11/22/1985  Rhetoric and Technical Communication
03/19/1993  Industrial Archeology
02/07/1994  Option: Discrete Mathematics for M.S. in Mathematical Sciences
07/30/1996  Environmental Policy
05/23/1997  Environmental Engineering
05/21/1999  Environmental Engineering Science
05/11/2001  Applied Science Education
11/25/2003  Mathematical Sciences
03/05/2004  M.B.A., Business Administration
06/25/2004  Forest Ecology and Management
06/25/2004  Applied Ecology
06/25/2004  Forest Molecular Genetics and Biotechnology

**Graduate Certificates**
03/03/2004  Interdisciplinary Graduate Certificate in Sustainability
01/25/2008  Interdisciplinary Graduate Certificate in Nanotechnology
07/03/2008  Grad Certificate, in Advanced Electric Power Engineering

**Bachelors Degrees**
11/28/1916\(^a\)  4 yr degree inc. summer breaks w/alternate 3 year w/o breaks to degree (Mining)
01/08/1925\(^a\)  Charter broadened to allow degrees in other engineering branches besides Mining
1888\(^c\)  Bachelor of Science (probably by Charter)
1890\(^c\)  Engineer of Mines (by Charter)
11/12/1925a Metallurgical Engineer
12/16/1926a General Engineering
11/25/1926a Civil Engineering
11/25/1926a Mechanical Engineering
12/16/1926a Chemistry
11/12/1925a Chemical Engineering
11/12/1925a Electrical Engineering
12/16/1926a Geology
1933c General Science
04/25/1938a Forestry
1943c Geological Engineering
06/06/1941 Medical Technology (Laboratory Technician Training p.249)
11/12/1960 p. 469 BOC supported agreement w/hospitals for internship for Med Techs
10/10/1945a Engineering Physics (see name changes)
10/10/1945a Physics
10/10/1945a Pre-Med (developed from Medical Technology)
10/10/1945a Pre-Dental (developed from Medical Technology)
1949c Engineering Administration
1950c Mathematics
02/25/1955 Business Administration
04/28/1956 Geophysical Engineering
09/17/1956 Nursing
07/01/1962 Biological Sciences
05/17/1967 Senate date:Proposal 3-67 allowing Science Teacher Education programs 08/11/1967
Liberal Arts 3 new options:

    History
    English
    Technical Writing
10/06/1970 Computer Science and Engineering
10/06/1970 Earth Sciences Major
06/16/1972 Social Sciences
04/13/1973 Computer Science
01/28/1982  Scientific and Technical Communication B.S.
05/23/1986  Environmental Engineering
05/20/1994  School of Technology four year degree
05/02/1994  Option in Plant Sciences, Biological Sciences B.S.
01/23/1995  Atmospheric Science Option in the Geology B.S.
08/17/1997  Earth Science Education Option in the B.S., Geology
05/23/1997  Applied Ecology and Environmental Sciences
04/21/1998  Pre-Law Option in Social Sciences B.S.
03/25/1998  Social Studies Education Option in Social Sciences B.S.
06/18/1998  English Education Option in Liberal Arts B.A.
07/07/1999  Computer Engineering
08/03/2000  Biomedical Engineering
07/17/2001  Bioinformatics
12/13/2002  Computer Systems Science
12/13/2002  Computer Network and System Administration
07/25/2003  Software Engineering
03/05/2004  Psychology
06/25/2004  Wildlife Ecology and Management
04/22/2004  Engineering Technology, Conc. In Construction Management Technology
04/22/2004  Electrical Engineering Option Photonics
04/22/2004  Mathematical Sciences, Concentration in Education Preparation
04/22/2004  Biological Sciences, Fish Biology Concentration
06/25/2004  Communication and Culture Studies with Concentrations in:

  Communication in Contemporary Culture

  Communication in Human Interactions and Global Contexts

  Communication Media

04/29/2005  B.S.  Theatre and Entertainment Technology
04/29/2005  B.S.  Audio Production and Technology
04/29/2005  B.A.  Technical Theater
04/29/2005  B.A.  Sound Design
04/29/2005  B.S.  Cheminformatics
04/29/2005  B.S.  Pharmaceutical Chemistry
02/24/2006  B.S.  Anthropology
04/28/2006  B.S.  B.S. Biochemistry & Molecular Biology
04/28/2006  B.S.  Exercise Health
05/04/2007  B.S.  Health and Physical Education
                 Concentration in Fitness and Sports Management
                 Concentration in Secondary Education
02/28/2008  B.A.  Theatrical and Electronic Media Performance

**Name Changes Bachelors Degrees and M.S. Degrees**

02/24/1961  Engineering Physics to Applied Physics
04/10/1970  Physical Metallurgy Option to Material Science and Engineering
04/29/2005  B.S.  Pre-Law changed to Law and Society
06/24/2005  B.S.  Surveying to Surveying Engineering
06/24/2005  B.S.  BSET w/Conc in Elec Eng Tech to Electrical Engineering Technology
06/24/2005  B.S.  BSET w/Conc in Mech Eng Tech to Mechanical Engineering Technology
06/24/2005  B.S.  BSET w/Conc in Civil Eng Tech to Construction Management
04/28/2006  B.S.  BSET, Eng. Tech Conc in ME TO BSIT, Industrial Technology
05/04/2007  M.S.  MS in Mineral Economics Degree to Applied Natural Resource Economics

**Associate Degrees**

10/31/1961  **BOC mentioned Existing Medical BS degree with Pre-Biology, Pre Medicine, and Pre Dentistry – 2 year programs**

04/10/1970  Metals Technology
06/16/1972  Applied Nursing
06/16/1972  Electromechanical Engineering Technology
05/23/1997  Chemical Engineering Technology

**Suspended/Eliminated Bachelors Degrees (by Board of Control)**
04/28/1956  Geophysics
03/12/2004  Mining Engineering (suspended)
11/29/2001  Minerals Processing Engineering Option (eliminated)

**Suspended/Eliminated Associate Degrees (by Board of Control)**

12/14/2001  Forest Technology (eliminated)
03/12/2004  Chemical Engineering Technology (suspended)

1981<sup>s</sup>  Applied Science Degree Nursing Technology (Proposal 1-81 to continue offering was Defeated-no dates listed)

**Suspended Minors**

04/22/2004  Speech (suspended)

**Minors and Certificates** in production as of Administrative approval date (note: no BOC approval required. Administrative approval dates may be verified by looking at the Senate Proposal-bottom of proposal on web page):

Certificate in Foreign Language and Area Study 09/23/1983

One certificate with focus in either French, German, or Spanish

Certificate in International Technology and Society 05/03/1989

Advanced Certificate in Foreign Language and Area Study 05/03/1989

Certificate in International Business 4/29/1992S

Certificate in Industrial Forestry 09/18/1997

Certificate in Media 05/30/2000

**The following minors were approved via Senate proposal 00-10**

American Studies
Historical Studies
Environmental Studies
International Studies
Social and Behavioral Studies

Mining
Physics
Astrophysics

Earth Sciences
Geological Engineering
Remote Sensing
Communication Studies
Ethics and Philosophy
Journalism
Psychology

Music (This is a three track minor under which students select one of three tracks: General Music, Music Technology, or Jazz Idiom.)
Presentation
Theatre Arts
Technical Theatre
Art

Computer Science
Military Arts and Science
Aerospace Studies
Mathematical Sciences
Electronic Materials
Mineral Processing
Structural Materials
Economics
Wood Science

Biological Sciences (This is a two track minor with one track in organismal biology and one in cellular and genetic organization of living systems.)
Microbiology
Biochemistry
Ecology
Plant Biotechnology
Plant Sciences

Chemistry

Above listed minors in proposal 00-10 Adopted by Senate: April 26, 2000
Approved by President: May 8, 2000

Certificate in Writing 05/30/2000
Certificate in Design Engineering 12/05/2001
Minors in Modern Language 01/03/2002
  French
  German
  Spanish
International Minors in Modern Languages 01/03/2002
  French
  German
  Spanish
Enterprise Minor 03/12/2002
Applied Geophysics Minor 03/06/2003
Minor Municipal Engineering 11/25/2003
Minor in Polymer Science and Engineering 02/29/2004
Minor in Manufacturing 03/30/2004
Minor in Product Design 03/30/2004
Certificate  Actuarial Science                      02/21/2005
Minor      Bioprocess Engineering               02/28/2005
Minor      Nanoscale Science and Engineering    02/21/2005
Minor      Coaching                             11/17/2005
Certificate Coaching                           11/17/2005
Minor      Electrical Engineering               02/06/2006
Minor      Diversity Studies                    04/18/2007
Minor, Law and Society                          02/18/2008
UGrad Certificate in Electric Power Engineering 03/19/2008
Minor in Pharmaceutical Chemistry              04/07/2008
UGrad Certificate GIS (SFRES)                   04/07/2008

Sault Ste. Marie Branch Campus Degrees mentioned in BOC Minutes (w/meeting date)

04/29/1961  Sault Branch:
            2 year program Mechanical Technology

04/10/1965  Associate Degree Nursing

12/17/1965  Associate in Electronics Technology

10/07/1966  New Programs LSSC:
            Associate Degree in Construction Engineering
            Associate Degree in Drafting and Design engineering Technology
            B.A. English, Language, and Literature
            B.A Social Studies
            B.S. Medical Technology
            B.S. Business Administration

12/1/1967   New Programs:
            45 hour majors-
            Mathematics
Overview of dating each of Michigan Technological University's degrees

This overview explains the methodology for how the degree approval dates were found as listed above in this report. The project began with a request to our provost for beginning and end dates to be used for official start and end program dates in our student information system.

A list researched for Michigan Tech’s Board of Control by Helene Hiner and kept updated from 1991 to present was used as a starting point. Other source material was located and includes:

- a two-page paper list found in the Office of Student Records and Registration (OSRR) vault of degrees conferred and year in which each degree was added,
- a black three-ring binder, Degrees Conferred By Name 1888-1974, found in an OSRR storage room (since relocated to the OSRR vault) which included original listings of names of graduates with specific degrees conferred for those years,
- Degrees offered from each catalog (located in OSRR vault) excluding missing volume from 1943-1944 (possibly not printed due to WWII shortages?)
- Board of Control Minutes books (located in the Administrative Building’s fifth floor vault in copy room)
- “Courses” section, Abstract of the Proceedings of the Michigan College of Mining and Technology, Annette L. Sibilisky, 1935 (located in Administrative Building’s fifth floor vault), and
- Faculty Senate Minutes (University Senate web site)

Each of these resources was useful as no one source was complete. The list of degrees conferred with year degrees were added was added on to the 1991 detailed listing. This gave a framework of years but
Proposal 20-09

no actual approval date. These years were cross-checked with the OSRR catalog information, which proved a bit less accurate in that some years certain degrees were not published as offered – but the degrees were not formally terminated either. Board of Control minutes were used for the year in the conferred list to locate an actual approval date by the board for each degree. There are several M.S. and one Ph.D. that were conferred as regular degrees (not honorary) that have no formal BOC approval date. It may be that an approval granted in 1926 was applied broadly, resulting in the granting of these degrees. The degrees are those marked with a ‘c’ after the year and no month/day.

Matching exact BOC dates to year-conferred was made somewhat less tedious and less prone to errors with the discovery of Annette Sibilsky’s 1935 Abstracts which summarized BOC minutes from 1888 to 1935 in a set of typed, tabulated, black, binder-formatted cross references. The original, older BOC minutes are all hand-written in beautiful, albeit difficult to read, script. Once found in Annette Sibilsky’s abstract, the actual BOC minutes were checked for corroboration.

Faculty Senate began formally here at Michigan Tech in 1959, with minutes now published to the University Senate website. There were some degrees where no BOC approval date was found but there was a Senate approval. Those degrees have the full date followed by ‘s’. There also were some degrees which are mentioned in Sibilsky’s abstract which do not have exactly the same mention in the BOC minutes. Those degrees (which do show they were conferred in OSRR records) are listed with the full date followed by ‘a’.

One interesting finding is that there are relatively few degrees that have been formally ended through today’s process with the Senate, BOC, and state. This seems to be a relatively recent process. Those Bachelors’, Associates’, and Minors’ are listed under the titles with ‘Suspended/Eliminated’ list these degrees with suspended or eliminated specified when found. I found no evidence of any advanced degrees being formally suspended. I have not cross-checked but it would not be difficult to come up with a list of degrees that we currently do not offer but are not formally suspended/eliminated. This may be done by determining if the degree in question is listed with a start or conferred dated and is not listed under the ‘Suspended/Eliminated’ listing.

Finally, Lake Superior State University is no longer a Michigan Tech satellite campus but was at one time. Since references were found for degrees specifically approved for that location during the time it was affiliated with Michigan Tech, I have listed those separately, at the end of the report. –Helene Hiner, March 2009

Introduced to the Senate as Emergency Submission: 15 April 2009
Adopted by Senate: 15 April 2009
Approved by Administration: 22 April 2009