

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, 5th Floor Admin vault
- 's' indicates Senate approval date (where no other date available).

06/06/1941 Graduate degree requirements are codified by BOC

07/06/1950 Graduate School and Grad Faculty Council officially created by BOC

Ph.D Degrees

6/3/1932^a Ph.D. requirements listed

1934^c Metallurgy (*not listed in catalog offerings; not in BOC minutes; however, degree*

conferred to Roy Ward Drier and Corbin T. Eddy in 1934)

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

Unsuspending 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^s 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 <i>(this may be permission for all engineering Degrees as many were conferred from 1930-54 but found no specific BOC approval)</i>
12/16/1926 ^a	M.S. Metallurgy
12/16/1926 ^a	M.S. Chemistry
12/16/1926 ^a	M.S. Geology
12/16/1926 ^a	M.S. Mechanical Engineering
1930 ^c	M.S. Electrical Engineering
1931 ^c	M.S. Geophysics
1931 ^c	M.S. Mining
1932 ^c	M.S. Civil Engineering
1933 ^c	M.S. Chemical Engineering
1942 ^c	M.S. Geological Engineering
1946 ^c	M.S. Metallurgical Engineering
1947 ^c	M.S. Mining Engineering
1950 ^c	M.S. Engineering Physics
1954 ^c	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)

11/12/1925 ^a	Metallurgical Engineer
12/16/1926 ^a	General Engineering
11/25/1926 ^a	Civil Engineering
11/25/1926 ^a	Mechanical Engineering
12/16/1926 ^a	Chemistry
11/12/1925 ^a	Chemical Engineering
11/12/1925 ^a	Electrical Engineering
12/16/1926 ^a	Geology
1933 ^c	General Science
04/25/1938 ^a	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
10/10/1945 ^a	Engineering Physics (see name changes)
10/10/1945 ^a	Physics
10/10/1945 ^a	Pre-Med (developed from Medical Technology)
10/10/1945 ^a	Pre-Dental (developed from Medical Technology)
1949 ^c	Engineering Administration
1950 ^c	Mathematics
02/25/1955	Business Administration
04/28/1956	Geophysical Engineering
09/17/1956	Nursing
07/01/1962	Biological Sciences
05/17/1967 ^s	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.
09/23/1983 ^s	Proposal 6-83 option in Science Technology and Society for a B.S. in Social Sciences-approved by administration.
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	<i>BOC mentioned Existing Medical BS degree with Pre-Biology, Pre Medicine, and Pre Dentistry – 2 year programs</i>	
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^S 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
Cert. (UG)	International Sustainable Development	11/31/2006
Minor	Diversity Studies	04/18/2007
Certificate	Global Technology Leadership	11/09/2007
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

Chemistry

History

Economics

Biology

24 hour minors-

Political Science

Sociology

Geography

Economics

Speech and Drama

12/06/1968 New Programs:

Education

Earth Science Major

Psychology Major

Sociology Major

Electronic Servicing Certificate Program

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

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

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