



Access - General

June 2010

State Grant Program

The North Dakota Student Financial Assistance Program (State Grant) provides \$1,200 non-repayable grants each year to North Dakota residents pursuing undergraduate degrees at North Dakota's public, private and tribal colleges. The purpose of these need-based grants is to assist students with the cost of attending North Dakota postsecondary institutions. A State Grant also reduces the amount of money a student needs to borrow for his or her education.

- More than 36,000 North Dakota students applied for a state grant in 2009-10. The State Grant Program was able to fund 7,865 needy students or about 21 percent. For 2009-10, the greatest unmet need of a State Grant Program recipient was \$16,512. Unmet need for this program is calculated as follows: cost of education minus parent/student expected contribution and minus the Federal Pell Grant equals unmet need. For academic year 2009-10, State Grant dollars were exhausted at an unmet need figure of \$1,483. In other words, those students demonstrating an unmet need of \$1,482 or less did not receive State Grant support. Historically, of the over 30,000 students who apply for the State Grant program each year, over 20,000 students exhibit some type of unmet financial aid need.
- State funding to support the State Grant Program in 2009-11 is equivalent to 5 percent of annual tuition collections.
- The State Grant Program has a federal maintenance of effort (MOE) requirement. Under federal law, states are required to meet or exceed the maintenance of effort requirement to ensure continued federal financial aid funding. The MOE requirement is the average expenditure of non-federal dollars for the past three years.

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State Grant Program (cont.)

Students Receiving State Grants Awarded by Institution Type				
	Public Institution	Private Non-Profit 4-Year Colleges & Hospital School of Nursing	Native American Community Colleges	Total
2010-2011 School Year (Estimate. Still in awarding process)				
# Applying 25,974				
# of Students Receiving Awards	6,264	1,172	376	7,810
\$ Awarded	\$7,515,254	\$1,405,800	\$451,200	\$9,372,254
% of Total \$ Awarded	80%	15%	5%	100%
% of all ND Students Attending College	%	%	%	100%
2009-2010 School Year				
# Applying 36,572				
# of Students Receiving Awards	6,257	1,075	533	7,865
\$ Awarded	\$6,803,350	\$1,151,845	\$567,000	\$8,522,195
% of Total \$ Awarded	80%	14%	6%	100%
% of all ND Students Attending College	88%	8%	4%	100%
2008-2009 School Year				
# Applying 36,073				
# of Students Receiving Awards	3,235	556	90	3,881
\$ Awarded	\$2,392,273	\$428,571	\$62,400	\$2,883,244
% of Total \$ Awarded	83%	15%	2%	100%
% of all ND Students Attending College	87%	9%	4%	100%

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ANALYSIS OF STATE GRANT

RECIPIENTS AND EXPENDITURES

BY TYPE OF INSTITUTION

	2008-09		2009-10		2010-11	
	Dollars	# of Awards	Dollars	# of Awards	Dollars	# of Awards
PUBLIC FOUR-YEAR						
Dickinson State Univ.	\$153,200	209	\$361,800	337	\$489,600	408
Mayville State Univ.	66,800	93	\$167,725	158	\$182,400	152
Minot State Univ.	277,611	376	\$821,768	761	\$933,165	778
ND State University	675,200	895	\$1,950,379	1,782	\$2,086,109	1,738
University of ND	548,000	721	\$1,557,000	1,394	\$1,627,200	1,356
Valley City State Univ.	82,556	111	\$206,637	188	\$258,483	215
TOTAL	\$1,803,367	2,405	\$5,065,309	4,620	\$5,576,957	4,647
% of Total Dollars	62.5%		59.4%		55.5%	
PUBLIC TWO-YEAR						
Bismarck State College	\$310,500	442	\$922,980	877	\$1,235,188	1,029
ND State College of Science	132,806	182	\$392,852	359	\$561,000	468
Dakota College at Bottineau**	44,000	61	\$122,400	116	\$150,000	125
Lake Region State College****	68,800	95	\$202,630	191	\$247,800	207
Williston State College****	32,800	50	\$97,179	94	\$131,060	109
Ft. Berthold CC	6,400	12	\$45,600	45	\$33,600	28
Sitting Bull College*	2,800	4	\$61,200	58	\$73,200	61
Turtle Mt. CC	46,000	63	\$258,600	239	\$228,000	190
United Tribes Tech. College	4,000	6	\$150,600	145	\$176,400	147
Cankdeska Cikana CC***	3,200	5	\$51,000	46	\$62,400	52
TOTAL	\$651,306	920	\$2,305,041	2,170	\$2,898,648	2,416
% of Total Dollars	22.6%		27.0%		28.8%	
PRIVATE FOUR-YEAR						
Jamestown College	\$131,371	169	\$263,245	230	\$207,600	173
Trinity Bible College	17,600	24	\$44,400	37	\$40,800	34
University of Mary	260,400	338	\$581,400	510	\$708,600	591
TOTAL	\$409,371	531	\$889,045	777	\$957,000	798
% of Total Dollars	14.2%		10.4%		9.5%	
HOSPITAL SCHOOLS						
MedCenter One	\$19,200	25	\$64,200	54	\$42,000	35
TOTAL	\$19,200	25	\$64,200	54	\$42,000	35
% of Total Dollars	0.7%		0.8%		0.4%	
PROPRIETARY FOUR-YEAR						
Rasmussen College-Fargo*****			\$198,600	244	\$364,800	304
Rasmussen College-Bismarck*****					\$214,800	179
TOTAL	\$0	0	\$198,600	244	\$579,600	483
% of Total Dollars	0.0%		2.3%		5.8%	
GRAND TOTAL	\$2,883,244	3,881	\$8,522,195	7,865	\$10,054,205	8,379

**State Grant Program
Budget Overview/Status**

	General Fund	Federal Funds	Total Funds
2009-11 Appropriation	\$ 19,025,594	\$ 348,428	\$ 19,374,022
2007-09 Carryover	553,546		553,546
2009-11 Adjusted Appropriation	<u>\$ 19,579,140</u>	<u>\$ 348,428</u>	<u>\$ 19,927,568</u>

FY10 Awards, Net of Refunds as of 6/28/10 (7,865 awards) (8,523,595)

Balance Available for FY11 \$ 11,403,973

FY11 Awarded to date, as of 6/28/10 * (9,501 awards) \$ 10,054,205

*Based on past experience, not all of these students will accept the award, and the NDUS will continue to make additional awards throughout 10-11 AY.

Projected Carryover to 2011-13 \$200,000 - \$300,000
2009-11 Adjusted Budget 19,927,568

Estimated Total Available for 2011-13 (Est 8,400 awards per year @ \$1,200) \$20,127,568 -
\$20,227,568

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▪ Application: Free Application For Federal Student Aid (FAFSA)

The FAFSA form is the application form all students complete to apply for various types of financial aid including the Federal Pell Grant, Federal Supplemental Education Opportunity Grant, Federal College-Work Study Program, Federal Perkins Loan Program, Federal Stafford Loan eligibility. Such information as family income, assets, size of family, age of the older parent, etc., are all reported on the FAFSA form. As part of this process, a federal calculation referred to as the Federal Needs Analysis Methodology (as approved by the U.S. Department of Education) computes an expected family contribution (EFC), which is the amount of money the federal government determines a family unit must contribute towards a student's education.

▪ How is eligibility for State Grant Program determined?

Currently, eligibility for the State Grant Program is determined by assigning to each applicant a "student budget," better known as "cost of education." The cost of education for the SSIG Program includes such things as tuition, fees, room, board, books and supplies, and miscellaneous expenses (example: personal items). At a NDUS institution, tuition and fees account for 40 percent of the total estimated student cost, while room, board, books, supplies, travel and other expenses account for the remaining 60 percent. A higher cost of education has been consistently assigned to the private non-profit colleges because of higher tuition costs. For the 2010-11 academic year, varying State Grant budgets were used (i.e., private institutions -- \$22,300; NDSU/UND -- \$17,100; four-year institutions -- \$14,700 and two-year institutions -- \$12,200) to arrive at an UNMET NEED figure. UNMET NEED is determined as follows:

Cost of education

minus	Pell Grant award (a federal grant program)
minus	Parent contribution (amount determined by a standard formula that uses such factors as taxable and non-taxable income, assets such as savings and the value of a business, and benefits including unemployment and social security)
minus	Student contribution (amount determined by a standard formula that uses such factors as taxable and non-taxable income, assets such as savings)
equals	UNMET NEED

Students are ranked in descending order according to "unmet need." Grant funds are then awarded to those with the highest "unmet need," continuing down the list until available

SSIG funds are exhausted. This rank order process must be followed in order to maintain receipt of federal funding, estimated to be \$350,000 in 2009-11.

In addition to financial need, below is a list of additional state and/or federal “eligibility requirements”:

- Must be a citizen or national of the United States or eligible non-citizen and a North Dakota resident.
- Must be a graduate of a high school, or hold the General Equivalency Diploma (GED), and be able to meet all requirements for admission as a full-time student of an eligible institution.
- Use any grant awarded at an eligible (in-state) institution in North Dakota. (Hereafter the term “eligible institution” means an accredited public or private institution in this state.)
- Enroll as a **full-time** student as defined by the eligible institution maintain full-time enrollment over the period for which a grant is awarded.
- Enroll in a program of at least one academic year as defined by the eligible institution.
- Be a first-time undergraduate student (a non-baccalaureate or graduate-degree-holding status) during the period of the award. (Any freshman through senior student is eligible to apply.) A student may not have attended college for more than 8 semesters or 12 quarters since their high school graduation.
- Not be in default on any Federal Family Education Loan Programs.
- Not owe a refund on any Title IV grants or loans.
- Meet a March 15 top priority consideration deadline date (date received).

▪ Eligible State Grant Institutions Types:

STATE UNIVERSITIES

Dickinson State University
Mayville State University
Minot State University
North Dakota State University
University of North Dakota
Valley City State University

PRIVATE COLLEGES

Jamestown College
MedCenter One College of Nursing
Rasmussen College, Bismarck and Fargo
Trinity Bible College
University of Mary

TWO-YEAR COLLEGES

Bismarck State College
Dakota Campus Bottineau
Cankdeska Cikana Community College
Fort Berthold Community College
Lake Region State College
North Dakota State College of Science
Sitting Bull College
Turtle Mt. Community College
Williston State College

VOCATIONAL-TECHNICAL SCHOOL

United Tribes Technical College

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Science, Technology, Engineering and Mathematics (STEM) Occupations Student Loan Forgiveness Program

Beginning in 2001, the North Dakota Legislature appropriated \$400,000 for the North Dakota University System (NDUS) to administer a STEM occupations student loan forgiveness program. This program was formerly administered under the title "Technology Occupations Student Loan Program." The intent of this program is to reduce student loan indebtedness for individuals who have: (1) graduated in STEM-related fields and (2) been employed in STEM occupations in the state for one year.

Recipients are eligible to receive \$1,500 in loan forgiveness each year they are employed in approved STEM occupations in North Dakota, up to a maximum of four years or \$6,000. The Bank of North Dakota is responsible for applying and/or forwarding loan forgiveness payments. To be eligible, a recipient must have a student loan from the Bank of North Dakota or other participating lender. Individuals must apply annually for new or continued funding.

- For academic year 2009-10, 782 new and continued-funding applications were received. Of the 782 applicants, 595 were funded.
- The average student loan indebtedness of funded applicants, as reported on their applications, was \$10,654.
- A breakdown of funded 2009-10 applicants by program area follows:

Program Areas of Funded Applications for 2009-10	# of Applicants Funded
Aeronautics/Aviation/Aerospace Science and Technology, General	1
Agricultural Mechanization, General	2
Agricultural/Biological Engineering and Bioengineering	9
Airline/Commercial/Professional Pilot and Flight Crew	2
Animal Sciences, General	5
Architectural Engineering Technology/Technician	7
Architecture	7
Atmospheric Sciences and Meteorology, General	2
Automobile/Automotive Mechanics Technology/Technician	1
Aviation/Airway Management and Operations	1
Biology Teacher Education	8
Biology/Biological Sciences, General	7

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Technology Occupations (cont.)

Program Areas of Funded Applications for 2009-10	# of Applicants Funded
Chemical Engineering	1
Chemistry Teacher Education	2
Chemistry, General	5
Civil Engineering Technology/Technician	11
Civil Engineering, General	60
Clinical Laboratory Science/Medical Technology/Technologist	14
Clinical/Medical Laboratory Technician	1
Computer and Information Sciences and Support Services, Other	2
Computer and Information Sciences, General	86
Computer and Information Sciences, Other	1
Computer Engineering, General	2
Computer Programming/Programmer, General	3
Computer Science	12
Computer Systems Analysis/Analyst	11
Computer Systems Networking and Telecommunications	15
Construction Engineering	9
Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	5
Diesel Mechanics Technology/Technician	5
Educational/Instructional Media Design	1
Electrical and Electronic Engineering Technologies/Technicians	10
Electrical & Power Transmission Installation/Installer, General	1
Electrical, Electronic and Communications Engineering Technology/Technician	5
Electrical, Electronics and Communications Engineering	40
Emergency Medical Technology/ Technician (EMT Paramedic)	3
Engineering Technology/General	9
Engineering, General	2
Food Science	1
Geological/Geophysical Engineering	1
Geology/Earth Science, General	4
Heating, Air Conditioning and Refrigeration Technology/Technician (ACH/ACR/ACHR/HRAC/HVAC/AC Technology)	1
Industrial Engineering	10
Industrial Mechanics and Maintenance Technology	1
Industrial Production Technologies/ Technicians, Other	7
Industrial Technology/Technician	12
Lineworker	1
Machine Tool Technology/Machinist	1

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Technology Occupations (cont.)

Program Areas of Funded Applications for 2009-10	# of Applicants Funded
Management Information Systems and Services, Other (some qualify)	2
Management Information Systems, General	45
Manufacturing Engineering	1
Manufacturing Technology/Technician	1
Mathematics Teacher Education	8
Mathematics, General	4
Mechanical Engineering	48
Medical Radiologic Technology/Science - Radiation Therapist	11
Microbiology, General	1
Natural Resources Management and Policy	6
Radiologic Technology/Science-Radiographer	27
Respiratory Care Therapy/Therapist	9
Small Engine Mechanics and Repair Technology/Technician	1
Statistics, General	1
Surgical Technology/Technologist	5
System, Networking, and LAN/WAN Management/Manager	5
Technology Teacher Education/ Industrial Arts Teacher Education	5
Web Page, Digital/Multimedia and Information Resources Design	1
Welding Technology/Welder	1
Wildlife Biology	3
Zoology/Animal Biology	3
TOTAL	595

- A breakdown of funded 2009-10 applicants by technology job occupations follows:

Technology Job Occupations of Funded Applicants for 2009-10	# of Applicants Funded
Administrative Services Managers	1
Agricultural and Food Science Technicians	3
Agricultural Engineers	7
Architects, Except Landscape and Naval	6
Atmospheric and Space Scientists	1
Biological Science Teachers, Postsecondary	2
Biological Scientists, All Other	1
Bus and Truck Mechanics and Diesel Engine Specialists	3
Chemical Engineers	1
Chemical Technicians	3
Chemistry Teachers, Postsecondary	1

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Technology Occupations (cont.)

Technology Job Occupations of Funded Applicants for 2009-10	# of Applicants Funded
Chemists	2
Civil Engineering Technicians	12
Civil Engineers	62
Commercial Pilots	3
Computer and Information Systems Managers	7
Computer Operators	2
Computer Programmers	42
Computer Science Teachers, Postsecondary	1
Computer Software Engineers, Applications	18
Computer Software Engineers, Systems Software	2
Computer Specialists, All Other	18
Computer Support Specialists	49
Computer Systems Analysts	12
Conservation Scientists	4
Construction Managers	2
Cost Estimators	2
Diagnostic Medical Sonographers	5
Education, Training, and Library Workers, All Other	2
Electrical and Electronic Engineering Technicians	2
Electrical and Electronic Equipment Assemblers	1
Electrical and Electronics Installers and Repairers, Transportation Equipment	1
Electrical and Electronics Repairers, Commercial and Industrial Equipment	3
Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	3
Electrical Engineers	34
Electrical Power-Line Installers and Repairers	1
Electro-Mechanical Technicians	3
Electronic Equipment Installers and Repairers, Motor Vehicles	1
Electronics Engineers, Except Computer	2
Emergency Medical Technicians and Paramedics	3
Engineering Managers	8
Engineering Technicians, Except Drafters, All Other	7
Engineers, All Other	16
Environmental Science and Protection Technicians, Including Health	1
Environmental Scientists and Specialists, Including Health	3
Farm Equipment Mechanics	1
Farmers and Ranchers	1

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Technology Occupations (cont.)

Technology Job Occupations of Funded Applicants for 2009-10	# of Applicants Funded
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	2
Food Scientists and Technologists	1
Forest and Conservation Technicians	3
Geoscientists, Except Hydrologists and Geographers	1
Graphic Designers	1
Heating, Air-Conditioning, and Refrigeration Mechanics and Installers	1
Industrial Engineering Technicians	1
Industrial Engineers	10
Industrial Machinery Mechanics	2
Instructional Coordinators	3
Managers, All Other	2
Materials Scientists	1
Mathematicians	1
Mechanical Engineering Technicians	3
Mechanical Engineers	42
Medical and Clinical Laboratory Technicians	1
Medical and Clinical Laboratory Technologists	13
Metal Workers and Plastic Workers, All Other	1
Microbiologists	1
Middle School Teachers, Except Special and Vocational Educat	5
Mixing and Blending Machine Setters, Operators, and Tenders	1
Network and Computer Systems Administrators	32
Network Systems and Data Communications Analysts	3
Operations Research Analysts	1
Petroleum Engineers	1
Petroleum Pump System Operators, Refinery Operators, and Gaugers	2
Power Distributors and Dispatchers	2
Power Plant Operators	7
Radiologic Technologists and Technicians	39
Respiratory Therapists	8
Respiratory Therapy Technicians	1
Secondary School Teachers, Except Special and Vocational Education	16
Soil and Plant Scientists	1
Statisticians	1
Surgical Technologists	5
Surveying and Mapping Technicians	3

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Technology Occupations (cont.)

Technology Job Occupations of Funded Applicants for 2009-10	# of Applicants Funded
Surveyors	3
Telecommunications Equipment Installers and Repairers, Except Line Installers	2
Transportation, Storage, and Distribution Managers	1
Vocational Education Teachers, Middle School	1
Vocational Education Teachers, Postsecondary	1
Vocational Education Teachers, Secondary School	2
Zoologists and Wildlife Biologists	2
TOTAL	595

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North Dakota University System
Teacher and STEM Loan Forgiveness Program History

Teacher Shortage Loan Forgiveness

	Projected (based on \$1,000 awards)							
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Eligible Applicants (renewed & continued)	316	286	393	377	403 *			
1st year awards	158	98	191	150	150	158	158	158
Continued awards	154	184	188	213	235	267	308	316
Total awards	312	282	379	363	385	425	466	474
Total dollars spent	\$312,000	\$282,000	\$379,000	\$363,000	\$385,000	\$425,000	\$466,000	\$474,000
Biennial total	\$594,000		\$742,000		\$810,000		\$940,000	

STEM Occupation Student Loan Forgiveness

	Projected (based on \$1,500 awards)							
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Eligible Applicants (renewed & continued)	195	194	351	499	782 *			
1st year awards	99	70	168	199	189	189	189	189
Continued awards	73	98	123	193	406	466	543	567
Total awards	172	168	291	392	595	655	732	756
Total dollars spent	\$172,000	\$168,000	\$291,000	\$392,000	\$892,500	\$982,500	\$1,098,000	\$1,134,000
Biennial total	\$340,000		\$683,000		\$1,875,000		\$2,232,000	

* Total number of applications entered as of 7-6-2010

North Dakota University System - Table 1 STEM Program Areas and Codes

List of Active Programs 2009

(Derived from 2000 Draft CIP's, United States Department of Education)

<u>CIP</u>	<u>Program Areas</u>	<u>CIP</u>	<u>Program Areas</u>	<u>CIP</u>	<u>Program Areas</u>	<u>CIP</u>	<u>Program Areas</u>
01.0201	Agricultural Mechanization, General • Agricultural Systems Management – NDSU	03.0508	Urban Forestry • Urban Forestry Technology – DCB	11.0401	Information Science/Studies • Information Science – UM • Virtual Business – MISU	13.1309	Technology Teacher Education/ Industrial Arts Teacher Education • Technology Education – DSU, UND, VCSU
01.0205	Agricultural Mechanics and Equipment/Machine Technology • John Deere Technology – NDSCS	03.0601	Wildlife and Wildlands Science and Management • Fisheries and Wildlife Sciences – VCSU • Wildlife and Fisheries Technology – DCB	11.0501	Computer Systems Analysis/Analyst • Information Systems – UND	13.1311	Mathematics Teacher Education • Elementary Education/Mathematics – UND • Math Teacher Education – UM • Mathematics Education – DSU, JC, MaSU, MISU, NDSU, VCSU
01.0401	Agricultural and Food Products Processing • Cereal Science – NDSU	04.0201	Architecture • Architecture – NDSU	11.0701	Computer Science • Computer Science – NDSU	13.1316	Science Teacher Education/General Science Teacher Education • Composite Science Education – VCSU • Comprehensive Science Education – NDSU • Earth Science Education – MISU, NDSU • Physical Science Education – MISU • Science Education – MISU, UND • Science Teacher Education – DSU
01.0901	Animal Sciences, General • Animal and Range Sciences – NDSU	04.0401	Environmental Design/Architecture • Environmental Design – NDSU	11.0801	Web Page, Digital/Multimedia and Information Resources Design • Desktop & Web publishing – MISU • Multimedia Technologies – RC • Web Page Development and Design – BSC	13.1319	Technical Teacher Education • Career and Technical Education – UND, VCSU • Technical Studies – LRSC
01.1001	Food Science • Food Protection – NDSU • Food Science – NDSU	04.0601	Landscape Architecture • Landscape Architecture – NDSU	11.0901	Computer Systems Networking and Telecommunications • Computer Applications – CCCC • Computer Support Specialist – BSC • Information Technology - Network Engineering – DCB	13.1322	Biology Teacher Education • Biological Education – NDSU • Biology Education – DSU, MISU • Biology Teacher Education – JC, UM • Composite Biology Education – MaSU, VCSU
01.1102	Agronomy and Crop Science • Plant Sciences – NDSU	11.0101	Computer and Information Sciences, General • Computer Information Systems – MaSU, NDSCS, UM, VCSU • Computer Science – DSU, JC, MISU, UND	11.1002	System, Networking, and LAN/WAN Management/Manager • Computer Systems Specialist – WSC	13.1323	Chemistry Teacher Education • Chemistry Education – DSU, JC, MISU, NDSU • Composite Chemistry Education – MaSU, VCSU
01.1103	Horticultural Science • Horticulture – NDSU	11.0103	Information Technology • Enterprise Application – VCSU • Information Technology – SBC	11.1004	Web/Multimedia Management and Webmaster • Information Technology - Web Master – DCB	13.1329	Physics Teacher Education • Composite Physical Science – MaSU
01.1105	Plant Protection and Integrated Pest Management • Plant Protection – NDSU	11.0199	Computer and Information Sciences, Other • Computer Systems Technology – DCB	11.9999	Computer and Information Sciences and Support Services, Other • Computer Information System (BAS) – MaSU • Information Technology - Web Design – DCB		
01.1201	Soil Science and Agronomy, General • Soil Science – NDSU	11.0201	Computer Programming/Programmer, General • Computer Science Basic Programming – MISU • Software Systems Design – RC	13.0501	Educational/Instructional Media Design • Instructional Design & Technology – UND		
03.0101	Natural Resources/Conservation, General • Environmental Technology-Natural Resource Management – DCB	11.0301	Data Processing and Data Processing Technology/ Technician • Computer Technology Management – DSU • Information Processing Technician – WSC • Information Technology – MaSU	13.1309	Technology Teacher Education/ Industrial Arts Teacher Education • Education – VCSU		
03.0103	Environmental Studies • Earth System Science and Policy – UND						
03.0104	Environmental Science • Environmental Science – FBCC, SBC						
03.0201	Natural Resources Management and Policy • Natural Resources Management – CCCC, NDSU						

• Indicates programs known to exist in North Dakota. Students graduating from comparable programs in other states are eligible when students meet North Dakota residency and other requirements.

Acronyms: BSC = Bismarck State College, DCB = Dakota College at Bottineau, DSU = Dickinson State University, FBCC = Fort Berthold Community College, JC = Jamestown College, LRSC = Lake Region State College, MaSU = Mayville State University, MISU = Minot State University, NDSCS = North Dakota State College of Science, NDSU = North Dakota State University, RC = Rasmussen College, TMCC = Turtle Mountain Community College, UM = University of Mary, UTTC = United Tribes Technical College, UND = University of North Dakota, VCSU = Valley City State University, WSC = Williston State College

<u>CIP</u>	<u>Program Areas</u>	<u>CIP</u>	<u>Program Areas</u>	<u>CIP</u>	<u>Program Areas</u>	<u>CIP</u>	<u>Program Areas</u>
13.1329	Physics Teacher Education <ul style="list-style-type: none"> Physical Science Education – MaSU Physics Education – MISU, NDSU 	14.3601	Manufacturing Engineering <ul style="list-style-type: none"> Manufacturing Engineering – NDSU 	15.0503	Energy Management and Systems Technology/Technician <ul style="list-style-type: none"> Energy Technician – SBC 	26.0101	Biology/Biological Sciences, General <ul style="list-style-type: none"> Biology – DSU, JC, MaSU, MiSU, NDSU, UM, VCSU Biology/Pre-Health – UND
14.0101	Engineering, General <ul style="list-style-type: none"> Engineering – NDSU Engineering Science – UM 	14.3801	Surveying Engineering <ul style="list-style-type: none"> Environmental Technology-Geographic Information Systems – DCB 	15.0506	Water Quality and Wastewater Treatment Management and Recycling Technology/Technician <ul style="list-style-type: none"> Environmental Technology - Water Management – DCB Water Quality Technology – DCB 	26.0202	Biochemistry <ul style="list-style-type: none"> Biochemistry – JC, NDSU, UND
14.0301	Agricultural/Biological Engineering and Bioengineering <ul style="list-style-type: none"> Agricultural & Biosystems Engineering – NDSU 	14.3901	Geological/Geophysical Engineering <ul style="list-style-type: none"> Geological Engineering – UND 	15.0507	Environmental Engineering Technology/Environmental Technology <ul style="list-style-type: none"> Environmental Technology-Laboratory & Field Technician – DCB 	26.0210	Biochemistry/Biophysics and Molecular Biology <ul style="list-style-type: none"> Biochemistry & Molecular Biology – NDSU
14.0701	Chemical Engineering <ul style="list-style-type: none"> Chemical Engineering – UND 	14.9999	Engineering, Other <ul style="list-style-type: none"> Engineering – UND 	15.0612	Industrial Technology/Technician <ul style="list-style-type: none"> Industrial Technology – UND Process Plant Technology – BSC 	26.0301	Botany/Plant Biology <ul style="list-style-type: none"> Botany – NDSU
14.0801	Civil Engineering, General <ul style="list-style-type: none"> Civil Engineering – NDSU, UND 	15.0000	Engineering Technology/General <ul style="list-style-type: none"> Engineering Technician – BSC 	15.0613	Manufacturing Technology/Technician <ul style="list-style-type: none"> Automated Manufacturing Technician – NDSCS 	26.0305	Plant Pathology/Phytopathology <ul style="list-style-type: none"> Plant Pathology – NDSU
14.0899	Civil Engineering, Other <ul style="list-style-type: none"> Materials & Nanotechnology – NDSU 	15.0101	Architectural Engineering Technology/Technician <ul style="list-style-type: none"> Architectural Drafting & Estimating Technology – NDSCS 	15.0699	Industrial Production Technologies/Technicians, Other <ul style="list-style-type: none"> Power Plant Technology – BSC 	26.0403	Anatomy <ul style="list-style-type: none"> Anatomy – UND
14.0901	Computer Engineering, General <ul style="list-style-type: none"> Computer Engineering – NDSU 	15.0201	Civil Engineering Technology/Technician <ul style="list-style-type: none"> Civil Engineering & Surveying Technology – NDSCS 	15.0701	Occupational Safety and Health Technology/Technician <ul style="list-style-type: none"> Occupational Safety & Environmental Health – UND 	26.0406	Cell/Cellular and Molecular Biology <ul style="list-style-type: none"> Cellular & Molecular Biology – NDSU
14.0903	Computer Software Engineering <ul style="list-style-type: none"> Software Engr – NDSU 	15.0303	Electrical, Electronic and Communications Engineering Technology/Technician <ul style="list-style-type: none"> Electric Power Technology – BSC Electrical Transmission Systems Technology – BSC Electronics/Telecommunications Technology – BSC 	15.0903	Petroleum Technology/Technician <ul style="list-style-type: none"> Petroleum Production Technology – WSC 	26.0502	Microbiology, General <ul style="list-style-type: none"> Microbiology – NDSU
14.1001	Electrical, Electronics and Communications Engineering <ul style="list-style-type: none"> Electrical & Comp Engr – NDSU Electrical Engineering – NDSU, UND 	15.0399	Electrical and Electronic Engineering Technologies/Technicians <ul style="list-style-type: none"> Electrical Technology – NDSCS Electronic Technology – NDSCS 	15.1001	Construction Engineering Technology/Technician <ul style="list-style-type: none"> Construction Mgmt Tech – NDSCS 	26.0503	Medical Microbiology and Bacteriology <ul style="list-style-type: none"> Microbiology – UND
14.1401	Environmental/Environmental Health Engineering <ul style="list-style-type: none"> Environmental Engineering – NDSU Environmental Geoscience – UND 	15.0499	Electromechanical & Instrumentation and Maintenance Technologies/Technicians, Other <ul style="list-style-type: none"> Instrumentation and Control Technologies – BSC 	15.1102	Surveying Technology/Surveying <ul style="list-style-type: none"> Geographic Information System Technician – BSC 	26.0701	Zoology/Animal Biology <ul style="list-style-type: none"> Zoology – NDSU
14.1801	Materials Engineering <ul style="list-style-type: none"> Materials & Nanotechnology – NDSU 	15.0501	Heating, Air Conditioning and Refrigeration Technology/Technician (ACH/ACR/ACHR/HRAC/HVAC/AC Technology <ul style="list-style-type: none"> Heating, Ventilating, Air Conditioning & Refrigeration Technology – NDSCS Refrigeration & Air Conditioning Technology – NDSCS 	15.1401	Nuclear Engineering Technology/Technician <ul style="list-style-type: none"> Nuclear Power Technology – BSC 	26.0702	Entomology <ul style="list-style-type: none"> Entomology – NDSU
14.1901	Mechanical Engineering <ul style="list-style-type: none"> Mechanical Engineering – NDSU, UND 			15.9999	Engineering Technologies/Technicians, Other <ul style="list-style-type: none"> Energy Technology – FBCC Nanoscience Technology – NDSCS 	26.0709	Wildlife Biology <ul style="list-style-type: none"> Fisheries & Wildlife Biology – UND
14.3301	Construction Engineering <ul style="list-style-type: none"> Construction Engineering – NDSU 			26.0101	Biology/Biological Sciences, General <ul style="list-style-type: none"> Biological Sciences – NDSU 	26.0801	Genetics, General <ul style="list-style-type: none"> Genomics and Bioinformatics – NDSU
14.3501	Industrial Engineering <ul style="list-style-type: none"> Industrial & Manufacturing Engr – NDSU Industrial Engineering & Management – NDSU 					26.0910	Pathology/Experimental Pathology <ul style="list-style-type: none"> Molecular Pathogenesis – NDSU
						26.1001	Pharmacology <ul style="list-style-type: none"> Pharmacology, Physiology and Therapeutics – UND
						26.1201	Biotechnology <ul style="list-style-type: none"> Biotechnology – NDSU
						26.1305	Environmental Biology <ul style="list-style-type: none"> Environmental & Conservation Sciences – NDSU

• Indicates programs known to exist in North Dakota. Students graduating from comparable programs in other states are eligible when students meet North Dakota residency and other requirements.

Acronyms: BSC = Bismarck State College, DCB = Dakota College at Bottineau, DSU = Dickinson State University, FBCC = Fort Berthold Community College, JC = Jamestown College, LRSC = Lake Region State College, MaSU = Mayville State University, MiSU = Minot State University, NDSCS = North Dakota State College of Science, NDSU = North Dakota State University, RC = Rasmussen College, TMCC = Turtle Mountain Community College, UM = University of Mary, UTTC = United Tribes Technical College, UND = University of North Dakota, VCSU = Valley City State University, WSC = Williston State College

<u>CIP</u>	<u>Program Areas</u>	<u>CIP</u>	<u>Program Areas</u>	<u>CIP</u>	<u>Program Areas</u>	<u>CIP</u>	<u>Program Areas</u>
26.9999	Biological and Biomedical Sciences, Other <ul style="list-style-type: none"> • Science – FBCC • Tribal Environmental Science – UTTC 	46.0303	Lineworker <ul style="list-style-type: none"> • Lineworker, Electrical – BSC 	48.0508	Welding Technology/Welder <ul style="list-style-type: none"> • Welding Technology – NDSCS 	51.1004	Clinical/Medical Laboratory Technician <ul style="list-style-type: none"> • Clinical Laboratory Technician – BSC • Medical Laboratory Technician – RC
27.0101	Mathematics, General <ul style="list-style-type: none"> • Mathematics – DSU, FBCC, JC, MaSU, MISU, NDSU, UM, UND, VCSU 	47.0101	Electrical/Electronics Equipment Installation & Repair, General <ul style="list-style-type: none"> • Electrical Wiring – UTTC 	49.0101	Aeronautics/Aviation/Aerospace Science and Technology, General <ul style="list-style-type: none"> • Aeronautical Studies – UND • Aviation – UND 	51.1005	Clinical Laboratory Science/Medical Technology/Technologist <ul style="list-style-type: none"> • Clinical Laboratory Science – JC, MISU, NDSU, UM, UND • Clinical Laboratory Science Management – UND • CLS Clinical Chemistry/Urinalysis – UND • CLS Hematology/Homeostasis – UND • CLS Immunohematology – UND • CLS Microbiology – UND • Medical Technology – JC
27.0301	Applied Mathematics <ul style="list-style-type: none"> • Applied Math, General – JC 	47.0104	Computer Installation and Repair Technology/Technician <ul style="list-style-type: none"> • Simulator Maintenance Technician – LRSC 	49.0102	Airline/Commercial/Professional Pilot and Flight Crew <ul style="list-style-type: none"> • Commercial Aviation – UND 		
27.0501	Statistics, General <ul style="list-style-type: none"> • Applied Statistics – NDSU • Statistics – NDSU 	47.0201	Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician <ul style="list-style-type: none"> • Heating, Ventilation and Air Conditioning – BSC • Mechanical Systems – NDSCS • Plumbing – FBCC 	49.0104	Aviation/Airway Management and Operations <ul style="list-style-type: none"> • Airport Management – UND • Aviation Management – UND • Aviation Systems Management – UND 		
30.0101	Biological and Physical Sciences <ul style="list-style-type: none"> • Math/Science Composite – UM 	47.0303	Industrial Mechanics and Maintenance Technology <ul style="list-style-type: none"> • Mechanical Maintenance Technology – BSC 	49.0105	Air Traffic Controller <ul style="list-style-type: none"> • Air Traffic Control – UND 	51.1099	Clinical/Medical Laboratory Science and Allied Professions, Other <ul style="list-style-type: none"> • Phlebotomy Technician – BSC
30.1101	Multi/Interdisciplinary Studies <ul style="list-style-type: none"> • Gerontology – NDSU 	47.0604	Automobile/Automotive Mechanics Technology/Technician <ul style="list-style-type: none"> • Automotive Service Technology – UTTC • Automotive Technology – BSC, CCCC, LRSC, NDSCS, WSC 	49.0108	Flight Instructor <ul style="list-style-type: none"> • Flight Education – UND 	52.0209	Transportation/Transportation Management <ul style="list-style-type: none"> • Transportation & Logistics – NDSU
40.0101	Physical Sciences <ul style="list-style-type: none"> • Physical Science – MISU, UND 	47.0605	Diesel Mechanics Technology/Technician <ul style="list-style-type: none"> • Caterpillar Dealer Service Technician – NDSCS • Diesel Technology – LRSC, NDSCS, WSC 	49.0199	Air Transportation, Other (some qualify) <ul style="list-style-type: none"> • Space Studies – UND 	52.1201	Management Information Systems, General <ul style="list-style-type: none"> • Information Systems – MISU • Information Technologies – LRSC • Information Technology Management – RC • Management Information Science – JC • Management Information Systems – MISU, NDSU, UM
40.0401	Atmospheric Sciences and Meteorology, General <ul style="list-style-type: none"> • Atmospheric Sciences – UND • Atmospheric Studies – UND 	47.0606	Small Engine Mechanics and Repair Technology/Technician <ul style="list-style-type: none"> • Recreational Engines Technology – NDSCS 	51.0904	Emergency Medical Technology/Technician (EMT Paramedic) <ul style="list-style-type: none"> • EMT Paramedic Technology – BSC 		
40.0501	Chemistry, General <ul style="list-style-type: none"> • Chemistry – DSU, JC, MaSU, MISU, NDSU, UND, VCSU 	47.0699	Vehicle Maintenance and Repair Technologies, Other (some qualify) <ul style="list-style-type: none"> • Automotive & Diesel Master Technician – NDSCS 	51.0907	Medical Radiologic Technology/Science - Radiation Therapist <ul style="list-style-type: none"> • Radiologic Technology – JC, MISU 		
40.0507	Polymer Chemistry <ul style="list-style-type: none"> • Coatings & Polymeric Materials – NDSU 	48.0501	Machine Tool Technology/Machinist <ul style="list-style-type: none"> • Machinist and Toolmaker – NDSCS 	51.0908	Respiratory Care Therapy/Therapist <ul style="list-style-type: none"> • Respiratory Care – NDSU, UM 		
40.0601	Geology/Earth Science, General <ul style="list-style-type: none"> • Geology – MISU, NDSU, UND 	48.0508	Welding Technology/Welder <ul style="list-style-type: none"> • Welding – BSC • Welding & Basic Machining – LRSC 	51.0909	Surgical Technology/Technologist <ul style="list-style-type: none"> • Surgical Technology – BSC 	52.1299	Management Information Systems and Services, Other (some qualify) <ul style="list-style-type: none"> • Applied Business Information Technology – MISU • Information Systems Management – RC • Knowledge Management – MISU
40.0801	Physics, General <ul style="list-style-type: none"> • Physics – MISU, NDSU, UND 			51.0910	Diagnostic Medical Sonography/Sonographer and Ultrasound Technician <ul style="list-style-type: none"> • Radiologic Sciences – NDSU • Radiologic Technology – UM 		
41.0301	Chemical Technology/Technician <ul style="list-style-type: none"> • Science Technology – NDSCS 			51.1002	Cytotechnology/Cytotechnologist <ul style="list-style-type: none"> • Cytotechnology – UND 		
41.9999	Science Technologies/Technicians, Other <ul style="list-style-type: none"> • Bio-fuels Technology – NDSCS • Nanoscience Technology – NDSCS 						
43.0106	Forensic Science and Technology <ul style="list-style-type: none"> • Forensic Science – UND 						

• Indicates programs known to exist in North Dakota. Students graduating from comparable programs in other states are eligible when students meet North Dakota residency and other requirements.

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North Dakota University System - Table 2. STEM Job Occupations and Codes

A degree from Table 1 is required for Table 2 occupations to qualify

(Derived from <http://online.onetcenter.org/crosswalk/>)

<u>SOC</u>	<u>Occupation</u>	<u>SOC</u>	<u>Occupation</u>	<u>SOC</u>	<u>Occupation</u>	<u>SOC</u>	<u>Occupation</u>
11-3011	Administrative Services Managers	17-2011	Aerospace Engineers	19-1020	Biologists	25-1021	Computer Science Teachers, Postsecondary
11-3021	Computer and Information Systems Managers	17-2021	Agricultural Engineers	19-1021	Biochemists and Biophysicists	25-1022	Mathematical Science Teachers, Postsecondary
11-3071	Storage and Distribution Managers	17-2031	Biomedical Engineers	19-1022	Microbiologists	25-1031	Architecture Teachers, Postsecondary
11-3071	Transportation Managers	17-2041	Chemical Engineers	19-1023	Zoologists and Wildlife Biologists	25-1032	Engineering Teachers, Postsecondary
11-9011	Crop and Livestock Managers	17-2051	Civil Engineers	19-1029	Biological Scientists, All Other	25-1041	Agricultural Sciences Teachers, Postsecondary
11-9011	Nursery and Greenhouse Managers	17-2061	Computer Hardware Engineers	19-1030	Conservation Scientists and Foresters	25-1042	Biological Science Teachers, Postsecondary
11-9012	Farmers and Ranchers	17-2071	Electrical Engineers	19-1031	Conservation Scientists	25-1043	Forestry and Conservation Science Teachers, Postsecondary
11-9021	Construction Managers	17-2072	Electronics Engineers, Except Computer	19-1031	Range Managers	25-1051	Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary
11-9041	Engineering Managers	17-2081	Environmental Engineers	19-1031	Park Naturalists	25-1052	Chemistry Teachers, Postsecondary
11-9121	Natural Sciences Managers	17-2111	Product Safety Engineers	19-1031	Soil and Water Conservationists	25-1053	Environmental Science Teachers, Postsecondary
11-9199	Managers, All Other	17-2111	Industrial Safety and Health Engineers	19-1032	Foresters	25-1054	Physics Teachers, Postsecondary
13-1051	Cost Estimators	17-2111	Fire-Prevention and Protection Engineers	19-1041	Epidemiologists	25-1071	Health Specialties Teachers, Postsecondary
13-1081	Logisticians	17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	19-1042	Medical Scientists, Except Epidemiologists	25-1081	Education Teachers, Postsecondary
15-0000	Computer and Mathematical Science Occupations	17-2112	Industrial Engineers	19-1099	Life Scientists, All Other	25-1194	Vocational Education Teachers, Postsecondary
15-1011	Computer and Information Scientists, Research	17-2121	Marine Engineers and Naval Architects	19-2011	Astronomers	25-2022	Middle School Teachers, Except Special and Vocational Education
15-1021	Computer Programmers	17-2121	Materials Engineers	19-2012	Physicists	25-2023	Vocational Education Teachers, Middle School
15-1021	Computer Science Teachers, Postsecondary	17-2131	Mechanical Engineers	19-2021	Atmospheric and Space Scientists	25-2031	Secondary School Teachers, Except Special and Vocational Education
15-1031	Computer Software Engineers, Applications	17-2141	Mining and Geological Engineers, Including Mining Safety Engineers	19-2031	Chemists	25-2032	Vocational Education Teachers, Secondary School
15-1032	Computer Software Engineers, Systems Software	17-2151	Nuclear Engineers	19-2032	Material Scientists	25-9011	Audio-Visual Collections Specialists
15-1041	Computer Support Specialists	17-2161	Petroleum Engineers	19-2041	Environmental Scientists and Specialists, Including Health	25-9031	Instructional Coordinators
15-1051	Computer Systems Analysts	17-2171	Engineers, All Other	19-2042	Geoscientists, Except Hydrologists and Geographers	25-9099	Education, Training, and Library Workers, All Other
15-1061	Database Administrators	17-2199	Aerospace Engineering and Operations Technicians	19-2043	Hydrologists	27-1014	Multi-Media Artists and Animators
15-1071	Computer Security Specialists	17-3021	Civil Engineering Technicians	19-2099	Physical Scientists, All Other	27-1024	Graphic Designers
15-1071	Network and Computer Systems Administrators	17-3022	Electrical Engineering Technicians	19-3099	Social Scientists and Related Workers, All Other	29-1124	Radiation Therapists
15-1081	Network Systems and Data Communications Analysts	17-3023	Electrical and Electronic Engineering Technicians	19-4011	Food Science Technicians	29-1126	Respiratory Therapists
15-1099	Computer Specialists, All Other	17-3023	Electronics Engineering Technicians	19-4011	Agricultural Technicians	29-2011	Medical and Clinical Laboratory Technologists
15-2011	Actuaries	17-3024	Electro-Mechanical Technicians	19-4011	Agricultural and Food Science Technicians	29-2012	Medical and Clinical Laboratory Technicians
15-2021	Mathematicians	17-3025	Environmental Engineering Technicians	19-4031	Chemical Technicians	29-2031	Cardiovascular Technologists and Technicians
15-2031	Operations Research Analysts	17-3026	Industrial Engineering Technicians	19-4041	Geological and Petroleum Technicians	29-2032	Diagnostic Medical Sonographers
15-2041	Statisticians	17-3027	Mechanical Engineering Technicians	19-4051	Nuclear Technicians	29-2033	Nuclear Medicine Technologists
15-2091	Mathematical Technicians	17-3029	Engineering Technicians, Except Drafters, All Other	19-4051	Nuclear Monitoring Technicians	29-2034	Radiologic Technologists
15-2099	Mathematical Science Occupations, All Other	17-3029	Engineering Technicians, Except Drafters, All Other	19-4091	Nuclear Equipment Operation Technicians		
17-1011	Architects, Except Landscape and Naval	17-3031	Surveying Technicians	19-4091	Environmental Science and Protection Technicians, Including Health		
17-1012	Landscape Architects	17-3031	Mapping Technicians	19-4092	Forensic Science Technicians		
17-1021	Cartographers and Photogrammetrists	19-1011	Animal Scientists	19-4093	Forest and Conservation Technicians		
17-1022	Surveyors	19-1012	Food Scientists and Technologists	19-4099	Life, Physical, and Social Science Technicians, All Other		
		19-1013	Soil and Plant Scientists				

<u>SOC</u>	<u>Occupation</u>
29-2034	Radiologic Technologists and Technicians
29-2034	Radiologic Technicians
29-2041	Emergency Medical Technicians and Paramedics
29-2053	Psychiatric Technicians
29-2054	Respiratory Therapy Technicians
29-2055	Surgical Technologists
29-9011	Occupational Health and Safety Specialists
29-9012	Occupational Health and Safety Technicians
33-3031	Fish and Game Wardens
43-9011	Computer Operators
43-9031	Desktop Publishers
45-1011	First-Line Supervisors/Managers of Agricultural Crop and Horticultural Workers
45-1011	First-Line Supervisors/Managers of Animal Husbandry and Animal Care Workers
45-2011	Agricultural Inspectors
45-2021	Animal Breeders
45-4011	Forest and Conservation Workers
47-1011	First-Line Supervisors/Managers of Construction Trades and Extraction Workers
47-4011	Construction and Building Inspectors
47-4021	Elevator Installers and Repairers
49-2011	Computer, Automated Teller, and Office Machine Repairers
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers
49-2091	Avionics Technicians
49-2093	Electrical and Electronics Installers and Repairers, Transportation Equipment
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment
49-2095	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay
49-2096	Electronic Equipment Installers and Repairers, Motor Vehicles
49-3011	Aircraft Mechanics and Service Technicians
49-3023	Automotive Master Mechanics
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists
49-3041	Farm Equipment Mechanics
49-3051	Motorboat Mechanics
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics
49-3092	Recreational Vehicle Service Technicians

<u>SOC</u>	<u>Occupation</u>
49-9011	Mechanical Door Repairers
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers
49-9041	Industrial Machinery Mechanics
49-9043	Maintenance Workers, Machinery
49-9044	Millwrights
49-9045	Refractory Materials Repairers, Except Brickmasons
49-9051	Electrical Power-Line Installers and Repairers
49-9062	Medical Equipment Repairers
49-9069	Precision Instrument and Equipment Repairers, All Other
49-9091	Coin, Vending, and Amusement Machine Servicers and Repairers
49-9098	Helpers--Installation, Maintenance, and Repair Workers
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers
51-2022	Electrical and Electronic Equipment Assemblers
51-2023	Electromechanical Equipment Assemblers
51-2031	Engine and Other Machine Assemblers
51-3091	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders
51-3092	Food Batchmakers
51-3093	Food Cooking Machine Operators and Tenders
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic
51-4012	Numerical Tool and Process Control Programmers
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic
51-4022	Forging Machine Setters, Operators, and Tenders, Metal and Plastic
51-4023	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic
51-4034	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic
51-4035	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic

<u>SOC</u>	<u>Occupation</u>
51-4041	Machinists
51-4111	Tool and Die Makers
51-4121	Solderers and Brazers
51-4121	Welders, Cutters, and Welder Fitters
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders
51-4191	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic
51-4192	Lay-Out Workers, Metal and Plastic
51-4199	Metal Workers and Plastic Workers, All Other
51-6062	Textile Cutting Machine Setters, Operators, and Tenders
51-6063	Textile Knitting and Weaving Machine Setters, Operators, and Tenders
51-6064	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders
51-7041	Sawing Machine Setters, Operators, and Tenders, Wood
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing
51-8011	Nuclear Power Reactor Operators
51-8012	Power Distributors and Dispatchers
51-8013	Power Plant Operators
51-8031	Water and Liquid Waste Treatment Plant and System Operators
51-8093	Petroleum Pump System Operators, Refinery Operators, and Gaugers
51-9011	Chemical Equipment Operators and Tenders
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders
51-9021	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders
51-9121	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders
51-9141	Semiconductor Processors
51-9196	Paper Goods Machine Setters, Operators, and Tenders
53-1011	Aircraft Cargo Handling Supervisors
53-2011	Airline Pilots, Copilots, and Flight Engineers
53-2012	Commercial Pilots

<u>SOC</u>	<u>Occupation</u>
53-2021	Air Traffic Controllers
53-2022	Airfield Operations Specialists
53-3011	Ambulance Drivers and Attendants, Except Emergency Medical Technicians

NORTH DAKOTA UNIVERSITY SYSTEM PROCEDURES MANUAL

Subject: STUDENT AFFAIRS

Effective: February 3, 2010

Procedure: 508.1.1 Science, Technology, Engineering, and Mathematics (STEM) Occupations Student Loan Program

NOTE: This program was formerly administered under the title "Technology Occupations Student Loan Program."

The intent of this program is to reduce student loan indebtedness for individuals who have graduated in a STEM related field and been employed in a STEM occupation in North Dakota for one year.

The number of funded applicants is limited and contingent upon legislative appropriations; therefore, not all qualified applicants are assured funding. All qualified applicants for this Program will be considered in priority order as defined in Section 3.

The Bank of North Dakota is responsible for applying loan forgiveness payments for funded recipients by July 30th of each year. **The NDUS will notify all funded recipients of their award by July 30th of each year; no notice will be sent to applicants not funded.**

Funding recipients are eligible to receive up to \$1,500 per year in continued loan forgiveness for each year they are employed in an approved STEM occupation in North Dakota, subject to a maximum of 48 months of eligible employment. Individuals must apply or re-apply annually for new or continued funding.

Section 1 – Qualifications

To qualify for the STEM Occupations Student Loan Program, an applicant:

- a. Must have graduated from a board-approved college;
- b. Must have successfully completed a board-approved STEM-related program;
- c. Must have maintained at least a cumulative 2.5 grade point average based on a 4.0 grading system, at a board-approved college;
- d. Must have a student loan with the Bank of North Dakota or other participating lender and not be in default on that student loan;
- e. Following graduation, must have been employed in a board-approved STEM occupation for 12 months' employment in North Dakota beginning at least by

July 1 of the previous year or, at least a 9-month teaching contract on a full time basis in a school district or nonpublic (private) school in the state; and

- f. In order to receive continued funding, must continue to meet all qualifications.

Section 2 – Terms and Definitions

- a. **Board-approved college** means a postsecondary institution recognized by the U.S. Department of Education and accredited by regional, national, professional or specialized accrediting bodies.
- b. **Board-approved STEM related program** means programs listed on Table 1—STEM Program Areas and Codes. These are broadly based upon North Dakota's targeted industries and the national Science and Mathematics Access to Retain Talent (SMART) grant program eligibility with the categories defined by the National Center for Education Statistics' Classification of Instructional Programs.
- c. **STEM Job Occupations and Codes** means the STEM related Department of Labor job classifications as found in Table 2—STEM Job Occupations and Codes. A degree from Table 1 is required for Table 2 occupations to qualify.
- d. **Cumulative grade point average** means grade point average at graduation using a 4.0 grading scale (no rounding).
- e. **Default** means failure to repay a loan according to the terms agreed to when you signed a promissory note. Default may also mean failure to submit requests for deferment or cancellation on time.
- f. **Student Loan** means Federal Family Education Loan (FFEL) – Stafford subsidized, unsubsidized and FFEL Consolidated loans as well as the Dakota Education Alternative Loan (DEAL) obtained through the Bank of North Dakota as a lender, William D. Ford Federal Direct Loan – subsidized and unsubsidized loans, Federal Perkins Loan, FFEL or William D. Ford Federal Direct Consolidated Loans.
- g. **STEM** is an acronym for Science, Technology, Engineering, and Mathematics programs.

Section 3 –STEM Occupations Student Loan Program Procedures

- a. Applications for this program may be obtained by: (1) calling the NDUS at (701) 328-4114; (2) writing the NDUS at 600 East Boulevard Avenue – Dept. 215, Bismarck, ND 58505-0230; or (3) accessing the NDUS web site at www.ndus.edu and clicking on Student and Parent Information/Financial Aid.

Applications will not be accepted prior to May 1. A completed application must be received in the NDUS **no later than June 30.** Applications should be mailed, faxed or delivered to: Director of Financial Aid, NDUS, 600 East Boulevard Avenue – Dept. 215, Bismarck, ND 58505-0230, Fax (701) 328-2961.

A completed application **must** include a statement signed by the personnel director or CEO of the applicant's employer verifying that the applicant is employed full-time in one of the defined STEM occupations and the length of employment.

- b. Completed applications will be considered in priority order as follows:
- 1) Priority will be given first to the previous year program funded recipients who were continuously employed in an approved STEM occupation;
 - 2) Secondly, priority will be given to prior year funding recipients who were employed in an approved STEM occupation; and
 - 3) Finally, new program applicants will be funded.
- If available funding is sufficient to fund some but not all eligible applications in a priority category, funding shall be allocated based on date of receipt by the NDUS of completed applications, beginning with those received on (but not before) May 1, continuing with those received May 2, and so on, to the extent funds are available.

Summary of forms to be completed and returned to NDUS office:

1. Application
2. Final college transcript that reflects degree earned and the date received (attach copy for verification purposes)

Questions about the program and procedures for making application should be directed to:

Financial Aid Director
 North Dakota University System
 600 East Boulevard Avenue – Dept. 215
 Bismarck, ND 58505-0230
 Phone: Gina Padilla at (701) 328-2964 or Peggy Wipf at (701) 328-4114

REFERENCE: SBHE Policy 508.1

HISTORY: Chancellor's Cabinet Meeting, November 14, 2001
Editorial changes made 1/15/02
Editorial changes made 3/13/02
 Chancellor's Cabinet reviewed suggested changes, listserv message sent October 21, 2002. Amendments reviewed and approved by Chancellor, October 25, 2002.
 Chancellor's Cabinet Meeting, September 2003.
 Chancellor's Cabinet Meeting, November 2004.
 Chancellor's Cabinet Meeting, August 18, 2005.
 Chancellor's Cabinet Meeting, January 11, 2007.
 Chancellor's Cabinet Meeting, February 14, 2008.
 Chancellor's Cabinet Meeting, March 19, 2008.
 Chancellor's Cabinet Meeting, March 12, 2009.
 Chancellor's Cabinet Meeting, February 3, 2010.

NORTH DAKOTA UNIVERSITY SYSTEM

The Vital Link to a Brighter Future

Application for STEM Occupations Student Loan Forgiveness Program

Application year: May 1, 2010 - June 30, 2010

Note: This program was formerly administered under the title "Technology Occupations Student Loan Forgiveness program."

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| <ul style="list-style-type: none"> • Follow instructions carefully • Disclosure of your Social Security number is voluntary. Social Security numbers are used as an individual ID number for record keeping and administrative purposes. If you do not disclose your Social Security number, an individual ID number will be assigned. Failure to provide a social security number may cause delays in administrative services such as financial aid processing. • Questions about the program or procedures for making application should be directed to Gina Padilla at 701.328.2964 or Peggy Wipf at 701.328.4114. | <ul style="list-style-type: none"> • Print or type |
|--|---|

General Information

Name (Last, First, Middle Initial)	Social Security No.	Daytime Phone No.
Present Mailing Address	City	State/Zip Code
Permanent Mailing Address (if different)	City	State/Zip Code

Education

Did you graduate from a campus STEM related major as defined in Table 1? <input type="checkbox"/> Yes <input type="checkbox"/> No • If yes, the Program CIP Code for that major is: ____ - ____ - ____
List STEM Job Occupation Code (Reference Table 2): ____ - ____ - ____ A degree from Table 1 is required for Table 2 occupations to qualify.
Did you have a cumulative grade point average of at least 2.5 on a 4.0 scale in your college studies? <input type="checkbox"/> Yes <input type="checkbox"/> No (Attach copy of final college transcript)

Loan Information

Do you have an outstanding student loan obtained through the Bank of North Dakota as a lender or other participating lender? <input type="checkbox"/> Yes <input type="checkbox"/> No	
• If yes, indicate which loan you wish to have reduced under this program: (check only one)	
<input type="checkbox"/> FFEL Stafford (subsidized) <input type="checkbox"/> FFEL Stafford (unsubsidized) <input type="checkbox"/> FFEL Consolidated Loan <input type="checkbox"/> Dakota Educational Alternative Loan (DEAL)	<input type="checkbox"/> William D. Ford Federal Direct Loan (subsidized) <input type="checkbox"/> William D. Ford Federal Direct Loan (unsubsidized) <input type="checkbox"/> William D. Ford Federal Direct Consolidated Loan <input type="checkbox"/> Federal Perkins Loan
Amount owed on this loan:	as of : (Date)

If approved, I wish to have my loan forgiveness payment sent to the following holder of my student loan:

Name of Financial Institution	Phone No.
Address	City
	State/Zip Code

Statement of Certification and Authorization to be Completed by Applicant

I hereby certify that the information contained on this application is true and correct. I understand that I have the specific responsibility for applying for the STEM Occupations Student Loan Program **each year**. I also give my employer permission to release to the North Dakota University System any information that may be needed to verify the contents of my application, and for the North Dakota University System to share this information with the Bank of North Dakota or other participating lender to process payment of my outstanding loan.

Signature of Applicant

Date

Statement of Certification by Personnel Director and/or CEO of Company

I hereby certify that _____ (name of applicant) with social security number of _____ was employed full time with _____ (name and location of company in North Dakota) during the period of _____ (list complete dates of employment, e.g. June 1, 2009 - May 31, 2010) in an occupation which can be classified as a STEM job occupation SOC code number ____ - ____ as defined in Table 2.

Printed name and title of authorized official

Daytime Phone Number

Signature of authorized official

Date

Return application, certifications, and transcript to:

**STEM Occupations Loan Forgiveness
North Dakota University System
600 E Boulevard Ave Dept 215
Bismarck ND 58505-0230**