Michigan State University functions as a unit, with its colleges, divisions, schools, and departments serving one another. No single part is independent of the others. The Michigan State University College of Law, through a special affiliation, functions fully as a part of the University, although it remains financially independent.

Most schools and departments offer courses at both the undergraduate and graduate levels. At the undergraduate level, first-year students and sophomores, except when enrolled in James Madison College, Lyman Briggs College, or the Residential College in the Arts and Humanities, are enrolled as part of the Neighborhood Student Success Collaborative (NSSC). Such students may select a field of study as a major preference; however, the academic responsibility for such students rests solely with the NSSC. During the first two years students begin taking (1) courses that apply to the university requirements as described in the *Undergraduate Education* section of this catalog, (2) courses appropriate to the particular major, and/or (3) courses of an exploratory nature. During the junior and senior years, students' primary focus is on courses, whether given by the colleges of the majors or others, which meet the needs of the academic programs. For high-achieving undergraduate students, colleges, schools, departments, and faculty, in cooperation with the Honors College, provide programs to encourage the intellectual development and achievement.

At the graduate level, colleges that offer graduate courses have developed graduate programs consistent with the highest national, international, and professional standards of the respective fields.

Education Abroad programs are sponsored by the University through its academic departments and schools and through cooperative arrangements with other universities. The University offers more than 275 programs in over 60 countries on all seven continents.

To provide broader access to its instructional resources, the University offers selected degree programs, certificate programs, and courses at various locations and via the web.
The materials throughout this catalog are intended to be cumulative. The *Undergraduate Education* section is applicable to undergraduate study, and the *Graduate Education* section refers to graduate study. The all–University policies and requirements given in the *General Information, Policies, Procedures and Regulations* section apply to both undergraduate and graduate study. These three sections serve as the foundation for the college statements, and the all-University sections and the college statements serve as the foundation for the department and school statements.

Each college statement addresses the purposes or role of the college in the University; the organizational structure of the college; undergraduate programs, including college policies and requirements for admission and graduation beyond the all-University requirements; and graduate study, including the college policies and requirements for admission and degree completion beyond the all-University requirements. The organization of the department and school statements is similar to that of the college statements.

SESSIONS

The university offers instruction throughout the year during the fall semester, spring semester, and summer sessions.

PERIOD COVERED BY REGISTRATION

The period covered by registration for a given semester or summer session is defined as commencing with the first day of classes as published in the university academic calendar, and extending through the day prior to the start of the first day of classes for the succeeding semester or the first summer session. The delivery of appropriate services requires at least minimum registration for that semester or summer session.

ACCREDITATION

Michigan State University is a member of the Association of Public and Land-grant Universities, Association of American Universities, American Council on Education, American Council of Learned Societies, Association of Graduate Schools, Council of Graduate Schools, Big Ten Academic Alliance, and International Association of Universities. The university is accredited by the Higher Learning Commission, 230 South LaSalle Street, Suite 7-500, Chicago, Illinois 60604-1411, *www.hlcommission.org*, 1-312-263-0456. Some individual programs, schools, and colleges is recognized by the accrediting agencies in their respective fields. For a list, visit *https://aacc.msu.edu/accreditation/accrediting-agencies*.

Information about the accreditation of individual programs, schools, and colleges is included in program descriptions in Academic Programs. Updated program listings may be found at *https://aacc.msu.edu/ucc*.

EQUAL OPPORTUNITY AND NON-DISCRIMINATION

Michigan State University is committed to the principles of equal opportunity and nondiscrimination. University programs, activities, and facilities are available to all without regard to age, color, gender (including gender identity and gender expression), genetic information, disability status, ethnicity, height, marital status, national origin, political persuasion, race, religion, sex (including pregnancy, sexual orientation), military or veteran status, or weight, or any other status protected by applicable federal or state law. In carrying out this commitment, the university is guided by the applicable federal and state laws and regulations and policies adopted by the Board of Trustees.

The University Anti-Discrimination Policy applies to all university community members and to education and employment programs and activities and prohibits discrimination and harassment based on age, color, gender (including gender identity and gender expression), genetic information, disability status, ethnicity, height, marital status, national origin, political persuasion, race, religion, sex (including pregnancy, sexual orientation), military or veteran status, or weight, or any other status protected by applicable federal or state law. The Office for Civil Rights and Title IX

Education and Compliance provides a system of addressing complaints of prohibited discrimination and harassment by conducting investigations where necessary and ensures prompt remedial action where discrimination or harassment is found.

For additional information, contact the Office for Institutional Diversity and Inclusion, Hannah Administration Building, 426 Auditorium Road, Room 444, 1-517-353-3924, *inclusion@msu.edu*, or visit *www.inclusion.msu.edu*. For additional information on the University's Anti-Discrimination Policy, contact the Office for Civil Rights and Title IX Education and Compliance, Olds Hall Suite 105, 408 West Circle Drive, 1-517-353-3922, *ocr.isr@msu.edu*.

PROFESSIONAL LICENSURE AND CERTIFICATION

Federal regulations require MSU to publicly disclose, for each educational program designed to meet the educational requirements for a specific professional license or certification required for employment in an occupation (or advertised as meeting those requirements), information about whether program completion would meet those requirements in a state. These public disclosure requirements apply to all programs, regardless of their modality (i.e., on-ground, online, and hybrid programs). MSU discloses the required information related to the educational requirements for professional licensure and certification in the table at *https://aacc.msu.edu/-/media/assets/aacc/docs/state-authorization/plc-disclosures.pdf?rev=ac2a924aabda45d5a6029051bd05ed00&hash=31BAEC5CB2596C2D199EBEEB98B35F56*.

All current and prospective students are encouraged to contact the applicable professional licensure/certification boards in their respective states for additional information regarding professional licensure/certification requirements, including, without limitation, information regarding any non-educational requirements (such as work experience, background clearance, or examination by outside entities, such as bar examinations).

The information in the table should not be construed as guaranteeing that any particular professional licensure/certification authority will approve a student's application; nor should the information in the table be read to imply that other requirements for professional licensure/certification do not exist or that other requirements for professional licensure/certification have been determined to have been met by MSU's program/course, or that any necessary approvals for clinical or other experiential learning placements are secured by virtue of a student's enrollment at MSU.

State professional licensure/certification requirements are subject to change at any time.

STUDENT CONSUMER INFORMATION

Michigan State University seeks to make available to prospective and enrolled students' full information on all pertinent matters that would affect their attendance at the university. These matters include academic programs, financial aid programs, eligibility requirements for financial aid, cost of attending the institution, refund policy, program integrity (complaints) and, to the extent available, patterns of retention in offered curricula. Information is accessible at *https://aacc.msu.edu/compliance/consumer-protectionInformation*. Information is also available in various university publications, such as this catalog and information brochures for prospective students; or inquiries may be made of appropriate MSU administrative offices and Web sites. Typical sources include:

Office of Admissions
Hannah Administration Building
426 Auditorium Road, Room 250
(For prospective students)
www.admissions.msu.edu
Office of the Controller
Hannah Administration Building
426 Auditorium Road, Room 305
www.ctlr.msu.edu
Office of Financial Aid
Student Services Building
556 E. Circle Drive, Room 252
www.finaid.msu.edu
Office of the Registrar
Hannah Administration Building
426 Auditorium Road, Room 150
(For enrolled students)
www.reg.msu.edu

Additional information on university rules and regulations affecting students is published in the resource guide Spartan Life and other publications and is available at *www.msu.edu*.

GRADUATION RATES AT MICHIGAN STATE UNIVERSITY

Admission to Michigan State University is based upon academic preparation and ability. To assist students in their educational planning, as well as for institutional planning and reporting, first-time degree-seeking undergraduate students are included in a cohort each fall semester. This cohort is followed to determine the rate of retention and graduation from Michigan State University.

Decisions by students to complete degree programs in more than four years may vary from personal to programmatic reasons. The most recent Graduation Rate Survey, based on the 2017 entering cohort, indicates that 81% of bachelor degree-seeking students graduated within 6 years, or 150% of the normal time to award, 79% graduated within 5 years, and 63% within 4 years. These data compare favorably to graduation statistics from similar institutions. Additionally, some students in the initial cohort will eventually graduate at other institutions through transfer or pre-baccalaureate entry into professional programs.

COLLEGES, SCHOOLS and DEPARTMENTS

Departments of instruction at Michigan State University are organized as follows:

College of Agriculture and Natural Resources
Agricultural, Food, and Resource Economics
Animal Science
Biosystems and Agricultural Engineering
Community Sustainability
Entomology
Fisheries and Wildlife
Food Science and Human Nutrition
Forestry
Horticulture
Packaging
Planning, Design and Construction
Plant Biology
Plant, Soil and Microbial Sciences
Residential College in the Arts and Humanities
College of Arts and Letters
African American and African Studies
Art, Art History, and Design
English
Linguistics, Languages and Cultures
Philosophy
Religious Studies
Romance and Classical Studies
Theatre
Program in Women, Gender, and Social Justice
Writing, Rhetoric and Cultures
The Eli Broad College of Business
The Eli Broad Graduate School of Management
Accounting and Information Systems
Finance
Hospitality Business
Management
Marketing
Supply Chain Management
College of Communication Arts and Sciences
Advertising and Public Relations
Communication
Communicative Sciences and Disorders
Journalism
Media and Information
College of Education
Counseling, Educational Psychology and Special Education
Educational Administration
Kinesiology
Teacher Education
College of Engineering
Biomedical Engineering
Biosystems and Agricultural Engineering
Chemical Engineering and Materials Science
Civil and Environmental Engineering
Computational Mathematics, Science, and Engineering
Computer Science and Engineering
Electrical and Computer Engineering
Mechanical Engineering
College of Human Medicine
Anesthesia
Biochemistry and Molecular Biology
Emergency Medicine
Epidemiology and Biostatistics
Family Medicine

Medicine
Microbiology, Genetics and Immunology
Neurology and Ophthalmology
Obstetrics, Gynecology and Reproductive Biology
Orthopedics
Pediatrics and Human Development
Pharmacology and Toxicology
Physiology
Psychiatry
Public Health
Radiology
Surgery
Translational Neuroscience
James Madison College
College of Law
Lyman Briggs College
College of Music
College of Natural Science
Biochemistry and Molecular Biology
Biomedical Laboratory Diagnostics Program
Chemistry
Computational Mathematics, Science, and Engineering
Earth and Environmental Sciences
Integrative Biology
Mathematics
Microbiology, Genetics and Immunology
Physics and Astronomy
Physiology
Plant Biology
Statistics and Probability
College of Nursing
College of Osteopathic Medicine
Biochemistry and Molecular Biology
Family and Community Medicine
Microbiology, Genetics and Immunology
Neurology and Ophthalmology
Orthopedics
Osteopathic Manipulative Medicine
Osteopathic Medical Specialties
Osteopathic Surgical Specialties
PA Medicine
Pediatrics
Pharmacology and Toxicology
Physical Medicine and Rehabilitation
Physician Assistant's Medicine
Physiology
Psychiatry
Radiology
College of Social Science
Anthropology
Criminal Justice
Economics
Geography, Environment, and Spatial Sciences
History
Human Development and Family Studies
Human Resources and Labor Relations
Political Science
Psychology
Social Work
Sociology
Program in Women, Gender, and Social Justice
College of Veterinary Medicine
Large Animal Clinical Sciences
Microbiology, Genetics and Immunology
Pathobiology and Diagnostic Investigation
Pharmacology and Toxicology

Physiology
Small Animal Clinical Sciences
Office of the Provost
Aerospace Studies—Air Force
Military Science—Army

PROGRAMS and AREAS OF STUDY

Michigan State University offers a wide variety of programs and areas of study that contribute to the overall strength of the university. Although some programs and areas of study are not available as majors, the following list indicates the breadth and depth of opportunities available to students. In addition, special programs, suited to individual needs and purposes may be arranged, particularly at the advanced levels.

Accelerator Science and Engineering
Accounting
Accounting Analytics
Accounting and Data Analytics
Accounting Foundations
Actuarial Science
Adult Gerontology-Clinical Nurse Specialist
Advertising and Public Relations
Advertising Analytics
Advertising Creative
Advertising Management
Aerospace Studies—Air Force
African American and African Studies
African Languages
African Studies
Agribusiness Management
Agricultural, Food and Resource Economics
Agricultural and Natural Resources Biotechnology
Agriculture
Agriculture, Food and Natural Resource Education
Agronomy
American Indian and Indigenous Studies
American Legal System
American Studies
Animal Science
Animation and Comics Storytelling in Media
Anthropology
Apparel and Textiles
Applied Behavior Analysis and Autism Spectrum Disorder
Applied Conservation Biology
Applied Development in International Agriculture and Natural
    Resources
Applied Engineering Sciences
Applied Mathematics
Applied Sport Sciences
Applied Statistics
Aquatic Ecology and Management
Arabic
Art and Art History
    Art Education
    Art History and Visual Culture
    Studio Art
Art Photography
Arts and Cultural Management
Arts and Humanities
Asian Pacific American Studies

Asian Studies
Astrophysics
Astrophysics and Astronomy
Athletic Training
Basic Medical Science
Biochemistry and Molecular Biology
Biochemistry and Molecular Biology/Biotechnology
Biology
Biomedical Engineering
Biomedical Laboratory Operations
Biomedical Laboratory Science
Biostatistics
Biosystems Engineering
Biotechnology
Black American and Diasporic Studies
Brand Marketing
Broadcast Journalism
Business
Business Administration
Business Data Science and Analytics
Business Research
Cell and Molecular Biology
Chemical Engineering
Chemical Physics
Chemistry
Chicano/Latino Studies
Child Development and Early Childhood Education:
    Birth to Kindergarten and
Special Education
Children's and Young Adult Literature
Chinese
Civil Engineering
Classical and Ancient Mediterranean Studies
Classical Studies
Climate Change Studies
Clinical Medicine
Clinical Mental Health Counseling
Clinical Nurse Specialist
Clinical Social Work
Coaching
Cognitive Science
Collaborative Piano
Comic Art and Graphic Novels
Commercial Floriculture
Communication
Communication Arts and Sciences-Media and Information Studies
Communication Leadership and Strategy
Communicative Sciences and Disorders
Community, Agriculture, Recreation and Resource Studies
Comparative Cultures and Politics
Comparative Medicine and Integrative Biology
Computational Data Science
Computational and Applied Mathematics
Computational Mathematics, Science, and Engineering
Computational Modeling
Computational Plant Science
Computational Statistics
Computer Engineering
Computer Science and Engineering
Connected Learning
Conservation Law
Construction Management
Contemporary Global Studies
Corporate Accounting
Creative Writing
Criminal Justice

Critical Studies in the Teaching of English
Crop and Soil Sciences
Crop Production
Crop Science
Curriculum, Instruction, and Teacher Education
Customer Experience Management
Cybercrime and Digital Investigation
Cyber Criminology and Cyber Security
Dairy Production
Dance
Data-enabled Water Sustainability and Equity
Data Science
Dietetics
Digital Cultural Heritage and History
Digital Media
Digital Storytelling
Digital Studies in the Arts and Humanities
Documentary Film
Documentary Studies
Early Childhood and Family Policy
Early Childhood-General and Special Education
Earth and Environmental Sciences
Earth Observation and Geospatial Analytics
Ecology, Evolution and Behavior
Economic Geography
Economics
Economics of Education
Education Policy and Social Sciences
Educational Leadership
Educational Policy
Educational Psychology
Education and Society
Educational Psychology and Educational Technology
Educational Technology
Electrical and Computer Engineering
Elements of Global Supply Chain Management
Elementary Education
Elementary STEM Education
Energy
Engineering for International Service
Engineering Mechanics
English
Entrepreneurship
Entomology
Environment and Health
Environmental and Integrative Toxicological Sciences
Environmental and Resource Economics
Environmental Biology
Environmental Biology/Microbiology
Environmental Biology/Plant Biology
Environmental Biology/Zoology
Environmental Design
Environmental Economics
Environmental Economics and Policy
Environmental Engineering
Environmental Geography
Environmental Policy
Environmental Science
Environmental Soil Science
Environmental Sciences and Management
Environmental Studies
Environmental Studies and Agriscience
Epidemiology
European Studies
Experience Architecture

Family and Child Ecology
Family Community Services
Fiction Film Production
Film Studies
Finance
Financial Literacy for Personal and Community Success
Financial Planning and Wealth Management
Fish and Wildlife Disease Ecology and Conservation Medicine
Fish Ecology and Management
Fisheries and Wildlife
Food Industry Management
Food Processing and Technology
Food Processing, Technology and Safety
Food Regulatory Affairs
Food Safety
Food Science
Food Technology and Safety
Foreign Language Teaching
Forensic Science
Forest Carbon Science, Policy and Management
Forest Technology
Forestry
Foundations in Chemical Engineering
French and Francophone Studies
French Education
Game Design and Development
Games and Interactive Media
General Business Administration
General Management
Genetics and Genome Sciences
Genetics and Genomics
Geographic Information Science
Geography
Geological Sciences
Geophysics
German
Global and International Studies in Social Science
Global Food Law
Global Health
Global History
Global Plant Breeding
Global Public Health and Epidemiology
Global Studies in the Arts and Humanities
Graphic Design
Greek
Health and Risk Communication
Health Promotion
Healthcare Compliance
Healthcare Leadership
Healthcare Management
High-Performance Computing
Higher, Adult, and Lifelong Education
Hispanic Cultural Studies
History
History: Social Studies Education
Horticulture
Hospitality Business
Human Behavior and Social Services
Human Biology
Human Development and Family Studies
Human-Environment and Economic Geography
Human Medicine
Human Medicine Research
Human Nutrition
Human Nutrition-Environmental Toxicology

Human Resource Management
Human Resources and Labor Relations
Human Services Administration
Humanities—Prelaw
Indian and South Asian Studies
Indigenous Studies
Industrial Mathematics
Industrial Relations and Human Resources
Infancy and Early Childhood
Information and Communication Technology and Development
Information and Media
Information Science
Information Technology
Information Technology Management
Insurance and Risk Management
Instrumentation in High Energy Physics
Integrated Science-Secondary Education
Integrative Biology
Integrative Management
Integrative Pharmacology
Intellectual Property and Communications Law
Interdisciplinary Humanities
Interdisciplinary Studies in Social Science
International Business
International Digital Advertising
Interior Design
International Development
International Planning Studies
International Relations
Italian
Japanese
Jazz Studies
Jewish Studies
Journalism
K—12 English as a Second Language
K12 Computer Science Education
Kinesiology
Korean
Laboratory Research in Pharmacology and Toxicology
Landscape Architecture
Landscape and Nursery
Landscape Horticulture
Language and Literacy
Large Animal Clinical Sciences
Latin American and Caribbean Studies
Law Enforcement Intelligence and Analysis
Law, Justice, and Public Policy
Leadership for Equity Minded Change in Postsecondary Education
Leadership in Medicine for the Underserved
Leadership in Rural Medicine
Leadership of Organizations
Learning Design
Learning Design Leadership
Learning Experience Design
Learning Sciences
Legal Studies
Linguistics
Literacy and Language Instruction
Livestock Production
Management, Strategy and Leadership
Management Studies
Managerial Analysis for Decision Making
Manufacturing Engineering
Manufacturing Management
Marine Biology and Ecosystem Management
Marketing

Marketing Research and Analytics
Materials Science and Engineering
Materials Science and Mechanics
Mathematics
Mathematics, Advanced
Mathematics Education
Mathematics-Secondary Education
Measurement and Quantitative Methods
Mechanical Engineering
Media Analytics
Media and Communication Technology
Media Arts and Technology
Media Photography
Medical Laboratory Science
Medical Neuroscience
Medical Partners in Public Health
Microbiology, Genetics and Immunology
Migration Studies
Military Science—Army
Molecular, Cellular, and Integrative Physiology
Molecular Plant Sciences
Museum Studies
Music
   Collaborative Piano
   Composition
   Composition and Music Theory
   Conducting
   Education
   Jazz Studies
   Performance
   Theory
Music Career Development
Music Cognition
Musicology
Muslim Studies
Natural Resource Recreation and Tourism
Neuroscience
Neuroscience and the Law
Neuroscience-Environmental Toxicology
Nonprofit Fundraising
Nonprofit Leadership, Global Cultures, and Social Enterprise
Nonprofit Leadership, Religion, and Social Change
Nurse Practitioner
Nurse Practitioner-Adult Gerontological Primary Care
Nurse Practitioner-Family
Nurse Practitioner-Psychiatric Mental Health
Nursing
Nursing Practice
Nutrition and Dietetics
Nutritional Sciences
Operations and Sourcing Management
Organizational Behavior—Human Resource Management
Organizational Communication for Leadership
Osteopathic Medicine
P-12 Educational Leadership
PA Medicine
Packaging
Packaging Leadership for Professionals
Pathobiology
Pharmacology and Toxicology
Philosophy
Philosophy and Law
Physical Environment and Climate
Physics
Physiology
Physiology-Environmental Toxicology

Piano Pedagogy
Plant Biology
Plant Breeding and Genetics
Plant Pathology
Political Economy
Political Science
Political Science—Prelaw
Political Science —Public Policy
Political Theory and Constitutional Democracy
Popular Culture Studies
Portuguese
Professional and Public Writing
Program Evaluation
Psychology
Public Health
Quantitative Risk Analytics
Race and Ethnicity in the United States
Real Estate
Real Estate Construction and Development
Reflective Leadership in the Arts and Humanities
Rehabilitation Counseling
Rehabilitation Counselor Education
Religious Studies
Rhetoric and Writing
Russian
Russian and East European Studies
Sales Communication
School Psychology
Science Education
Science, Technology, Environment and Public Policy
Screenwriting
Second Language Studies
Secure and Connected Cyber-Physical Systems
Security Management
Semiconductor Manufacturing, Processing, and Devices
Serious Game Design and Research
Small Animal Clinical Sciences
Smart Agricultural Systems
Social Relations and Policy
Social Science
Social Science Quantitative Data Analytics
Social Work
Sociology
Soil Science
South Asian Languages
Spanish
Spanish Education
Spatial Ecology
Special Education
   Emotional Impairment
   Learning Disabilities
Special Education Leadership: Multi-Tiered Systems of Support
Sport Coaching
Sport Leadership and Management
Sports Analytics
Sports Business Management
Sports Journalism
Statistics
STEM
Strategic Communication
Strategic Management
Student Affairs Administration
Supply Chain Management
Sustainable Agriculture and Food Systems
Sustainable Bioproducts Science and Technology
Taxation

Teacher Leadership
Teaching and Curriculum
Teaching and Learning in Postsecondary Education
Teaching in Nursing
Teaching English to Speakers of Other Languages
   and Applied Linguistics
Technology Engineering
Telecommunication, Information Studies and Media
The City: Environment, Design and Society
Theatre
Transaction Services
Translation
Turfgrass Management
Urban and Community Forestry
Urban and Regional Planning
Urban Education
Urban Forest Management
Urban Resilient Redevelopment
User Experience
Veterinary Medicine
Veterinary Nursing
Viticulture
Wildlife Ecology and Management
Women, Gender and Social Justice
Women's Studies
Work and Organizational Psychology
World Language Teaching
World Politics
Writing
Youth and Society
Youth Development
Youth Development Specialist
Youth Agency Management and Administration
Zoology
Preprofessional
   Dentistry
   Law
   Medicine
   Optometry
   Osteopathy
   Podiatry
   Theology
   Veterinary Medicine

DEGREES

Michigan State University grants the following degrees upon satisfactory completion of appropriate programs of study in the departments, schools, and colleges.

Bachelor of Arts	B.A.
Bachelor of Fine Arts	B.F.A.
Bachelor of Landscape Architecture	B.L.A.
Bachelor of Music	B.Mus.
Bachelor of Science	B.S.
Bachelor of Science in Nursing	B.S.N.
Juris Doctor	J.D.
Master of Arts	M.A.
Master of Arts for Teachers	M.A.T.
Master of Business Administration	M.B.A.
Master of Fine Arts	M.F.A.
Master of International Planning Studies	M.I.P.S.
Master of Human Resources and Labor Relations	M.H.R.L.
Master of Jurisprudence	M.J.
Master of Laws	LL.M.
Master of Legal Studies	M.L.S.

Master of Music	M.Mus.
Master of Public Policy	M.P.P.
Master of Science in Nursing	M.S.N.
Master of Science	M.S.
Master of Social Work	M.S.W.
Master in Urban and Regional Planning	M.U.R.P.
Educational Specialist	Ed.S.
Doctor of Education	Ed.D.
Doctor of Medicine	M.D.
Doctor of Musical Arts	D.M.A.
Doctor of Nursing Practice	D.N.P.
Doctor of Osteopathic Medicine	D.O.
Doctor of Philosophy	Ph.D.
Doctor of Veterinary Medicine	D.V.M.

Undergraduate programs and degree requirements are described in a section entitled *Undergraduate Education*. Graduate programs and degree requirements as well as dual degree programs and joint degree programs are described in a section devoted to Graduate Education. For detailed information about the programs of study and requirements in the colleges and their schools and departments, the section in Academic Programs describing each college should be consulted.

TEACHER CERTIFICATION

For information about teacher certification opportunities, options, and requirements, refer to the statement on TEACHER CERTIFICATION in the *Department of Teacher Education* section of this catalog.

COURSE DESIGNATIONS

Throughout the programs of study given in this section, courses are identified either by course subject codes, course numbers, and course titles (example: CSE 101 Computing Concepts and Competencies) or by course names and course numbers (example: Computer Science and Engineering 101). Additional information about specific courses may be found in the frequently updated online version of Course Descriptions at: *www.reg.msu.edu/Courses/Search.aspx*.

To assist in locating information about specific courses in the Course Descriptions, the course subject codes are listed below in alphabetical order. For each subject code, the corresponding name is given.

SUBJECT

CODE	NAME
AAAS	African American and African Studies
AAE	Advanced Academic English
ABM	Agribusiness Management
ACC	Accounting
ACM	Arts and Cultural Management
ADV	Advertising
AE	Agricultural Engineering
AESC	Applied Engineering Sciences
AFR	African Languages
AFRE	Agricultural, Food, and Resource Economics
AIIS	American Indian and Indigenous Studies
AL	Arts and Letters
AMS	American Studies
ANES	Anesthesia

ANP	Anthropology
ANR	Agriculture and Natural Resources
ANS	Animal Science
ANTR	Human Anatomy
ARB	Arabic
AS	Aerospace Studies
ASN	Asian Languages
AST	Astronomy and Astrophysics
AT	Institute of Agricultural Technology
ATD	Apparel and Textile Design
BE	Biosystems Engineering
BLD	Biomedical Laboratory Diagnostics
BMB	Biochemistry and Molecular Biology
BME	Biomedical Engineering
BMS	BioMolecular Science
BS	Biological Science
BUS	Business
CAS	Communication Arts and Sciences
CE	Civil Engineering
CEM	Chemistry
CEP	Counseling, Educational Psychology and Special Education
CHE	Chemical Engineering
CHS	Chinese
CJ	Criminal Justice
CLA	Classical Studies
CLS	Chicano/Latino Studies
CMB	Cell and Molecular Biology
CMBA	Corporate MBA Program
CMP	Construction Management Program
CMSE	Computational Mathematics, Science, and Engineering
COM	Communication
CSD	Communicative Sciences and Disorders
CSE	Computer Science and Engineering
CSS	Crop and Soil Sciences
CSUS	Community Sustainability
DAN	Dance
DH	Digital Humanities
DS	Digital Storytelling
EAD	Educational Administration
EC	Economics
ECE	Electrical and Computer Engineering
ED	Education
EEM	Environmental Economics and Management
EGR	Engineering
EM	Emergency Medicine
EMB	Executive MBA
ENE	Environmental Engineering
ENG	English
ENT	Entomology
EPI	Epidemiology
ES	Earth Science
ESHP	Entrepreneurship
ESL	English as a Second Language
ESP	Environmental Science and Policy
FCM	Family and Community Medicine
FI	Finance
FIM	Food Industry Management
FLM	Film Studies
FLT	Foreign Language Teaching
FM	Family Medicine
FOR	Forestry
FRN	French
FRS	Forensic Science
FSC	Food Science
FW	Fisheries and Wildlife
GBL	General Business and Business Law

GD	Graphic Design		OGR	Obstetrics, Gynecology, and Reproductive Biology
GEN	Genetics		OMM	Osteopathic Manipulative Medicine
GEO	Geography		ORT	Orthopedics
GLG	Geological Sciences		OSS	Osteopathic Surgical Specialties
GNL	Global Non-profit Leadership		OST	Osteopathic Medicine
GRK	Greek		PA	PA Medicine
GRM	German		PDC	Planning, Design and Construction
GSAH	Global Studies in the Arts and Humanities		PDI	Pathobiology and Diagnostic Investigation
GUSP	Global Urban Studies Program		PED	Pediatrics
HA	History of Art		PH	Public Health
HB	Hospitality Business		PHD	Pediatrics and Human Development
HBIO	Human Biology		PHL	Philosophy
HCM	Healthcare Management		PHM	Pharmacology and Toxicology
HDFS	Human Development and Family Studies		PHY	Physics
HEB	Hebrew		PIM	Integrative Management
HED	Human Environment and Design		PKG	Packaging
HM	Human Medicine		PLB	Plant Biology
HNF	Human Nutrition and Foods		PLP	Plant Pathology
HRLR	Human Resources and Labor Relations		PLS	Political Science
HRT	Horticulture		PMR	Physical Medicine and Rehabilitation
HST	History		PPL	Public Policy
IAH	Integrative Studies in Arts and Humanities		PR	Public Relations
IBIO	Integrative Biology		PRT	Portuguese
IBUS	International Business		PSC	Psychiatry
IDES	Interior Design		PSL	Physiology
IM	Internal Medicine		PSY	Psychology
ISA	Indian and South Asian Languages		QB	Quantitative Biology
ISB	Integrative Studies in Biological Sciences		RAD	Radiology
ISE	Integrated Science Education		RCAH	Residential College in the Arts and Humanities
ISP	Integrative Studies in Physical Sciences		REL	Religious Studies
ISS	Integrative Studies in Social, Behavioral and Economic Sciences		RET	Retailing
			ROM	Romance Languages
ITL	Italian		RUS	Russian
ITM	Information Technology Management		SCM	Supply Chain Management
JPN	Japanese		SCS	Small Animal Clinical Sciences
JRN	Journalism		SME	Science and Mathematics Education
JS	Jewish Studies		SOC	Sociology
KIN	Kinesiology		SPN	Spanish
KOR	Korean		SSC	Social Science
LA	Landscape Architecture		STA	Studio Art
LAW	College of Law		STT	Statistics and Probability
LB	Lyman Briggs		SUR	Surgery
LCS	Large Animal Clinical Sciences		SW	Social Work
LIN	Linguistics		TE	Teacher Education
LL	Linguistics and Languages		THR	Theatre
LLT	Language, Learning and Teaching		TNG	Technology Engineering
LTN	Latin		TSM	Technology Systems Management
LWG	Law Graduate Students		TURF	Turfgrass Science and Management
MBA	Master of Business Administration		UGS	Undergraduate Studies
MC	James Madison College		UP	Urban Planning
ME	Mechanical Engineering		UX	User Experience
MED	Medicine		VM	Veterinary Medicine
MGI	Microbiology, Genetics and Immunology		WRA	Writing, Rhetoric and American Cultures
MGT	Management		WS	Women's Studies
MI	Media and Information		XA	Experience Architecture
MKT	Marketing			
MS	Military Science			
MSE	Materials Science and Engineering			
MTH	Mathematics			
MTHE	Mathematics Education			
MUS	Music			
MUSM	Museum Studies			
NEU	Neuroscience			
NOP	Neurology and Ophthalmology			
NSC	Natural Science			
NUR	Nursing			

UNIVERSITY ORGANIZATION

Refer to the Michigan State University home page for information about the central administration; the academic organization of the university; the academic governance system including Faculty Senate, University Council standing committees, advisory consultative committees and university student–faculty judiciaries; administrative advisory committees; and Board established committees, www.msu.edu.

The names of the persons who hold administrative positions and who serve on the committees are included at this site: *www.msu.edu/about/thisismsu/board-admin/index.html*.