

Appendices

Appendix A: Peer Groups

Appendix B: U-M Graduate Academic Programs Grouped by Broad Disciplinary Categories

Appendix C: U-M Graduate Academic and Graduate Professional Degree Programs

at the University of Michigan

Appendix D: U-M Ann Arbor Information Summary

Appendix E: Glossary

Appendix F: Photograph Captions and Credits

Appendices (19th Edition)

Appendix A: Peer Groups

The University of Michigan uses several groups of similar institutions of higher education for purposes of comparison. Here are descriptions and member lists of three peer groups referenced in the Michigan Almanac. Private institutions are shown in *italics*.

1) Official Peers (list developed by U-M officials)

- Columbia University in the City of New York
- Cornell University
- Duke University (added 2022)
- Emory University (added 2022)
- Harvard University
- Johns Hopkins University
- Massachusetts Institute of Technology
- Princeton University (added 2022)
- Northwestern University
- Ohio State University
- Stanford University
- University of California-Berkeley

- University of California-Los Angeles
- University of California-San Francisco (added 2020)
- University of Chicago
- University of Illinois at Urbana-Champaign
- University of North Carolina at Chapel Hill
- University of Pennsylvania
- University of Southern California
- University of Texas at Austin
- University of Virginia-Main Campus
- University of Washington-Seattle Campus
- University of Wisconsin-Madison
- Yale University
- 2) Association of American Universities (AAU) is a nonprofit association of the leading public and private research universities in the U.S. and Canada, listed with the year the school became a member in parenthesis. The Association of American Universities Data Exchange (AAUDE), a constituent group of the AAU, is comprised of the institutional research officers from each university as well as several non-AAU universities.
 - Boston University (2012)
 - Brandeis University (1985)
 - Brown University (1933)
 - California Institute of Technology (2934)
 - Carnegie Mellon University (1982)
 - Case Western Reserve University (1969)
 - Columbia University in the City of New York (1900)
 - Cornell University (1900)
 - Dartmouth College (2019)
 - Duke University (1983)
 - Emory University (1995)
 - Georgia Institute of Technology (2010)
 - Harvard University (1900)
 - Indiana University (1909)
 - Johns Hopkins University (1900)
 - Massachusetts Institute of Technology (1934)
 - Michigan State University (1964)
 - New York University (1950)
 - Northwestern University (1917)
 - Ohio State University (1916)
 - Pennsylvania State University
 - Princeton University (1900)
 - Purdue University (1958)
 - Rice University (1985)
 - Rutgers University-New Brunswick (1989)
 - Stanford University (1900)
 - Stony Brook University SUNY (2001)
 - Texas A & M University (2001)
 - Tufts University (2021)
 - Tulane University of Louisiana (1958)
 - University at Buffalo SUNY (1989)
 - University of Arizona (1985)
 - University of California-Berkeley (1900)
 - University of California-Davis (1996)
 - University of California-Irvine (1996)
 - University of California-Los Angeles (1974)

- University of California-San Diego (1982)
- University of California-Santa Barbara (1985)
- University of California-Santa Cruz (2019)
- University of Chicago (1900)
- University of Colorado, Boulder (1966)
- University of Florida (1985)
- University of Illinois at Urbana-Champaign (1908)
- University of Iowa (1909)
- University of Kansas (1909)
- University of Maryland at College Park (1969)
- University of Michigan (1900)
- University of Minnesota, Twin Cities (1908)
- University of Missouri, Columbia (1908)
- University of North Carolina at Chapel Hill (1922)
- University of Oregon (1969)
- University of Pennsylvania (1900)
- University of Pittsburgh (1974)
- University of Rochester (1941)
- University of Southern California (1969)
- University of Texas at Austin (1929)
- University of Utah (2019)
- University of Virginia (1904)
- University of Washington (1950)
- University of Wisconsin-Madison (1900)
- Vanderbilt University (1950)
- Washington University in St Louis (1923)
- Yale University (1900)

Canadian university AAU members (not included in comparison groups in this publication)

- McGill University (1926)
- University of Toronto (1926)

Non-AAU affiliates of AAUDE

- Syracuse University
- University of Nebraska-Lincoln

Peer Groups (19th Edition) 162

- 3) The **Big Ten**, an athletic conference formed in 1896 by seven public and private universities. The Big Ten membership is currently 14, listed with the year the school joined the conference in parenthesis. (Northwestern University, in italics, is the only private institution now in the Big Ten. The University of Chicago, also private, was a charter member, but left the conference in 1946.)
 - Indiana University (1899)
 - Michigan State University (1949)
 - Northwestern University (1896)
 - Ohio State University (1912)
 - Pennsylvania State University (1990)
 - Purdue University (1896)
 - Rutgers University (2014)

- University of Illinois (1896)
- University of Iowa (1899)
- University of Maryland (2014)
- University of Michigan (1896)
- University of Minnesota (1896)
- University of Nebraska (2011)
- University of Wisconsin (1896)

Appendix B: U-M Graduate Academic Programs¹ Grouped by Broad Disciplinary Categories (Rackham Divisions²)

Biological & Health Science / Life Sciences (Rackham Division 1)

- Agriculture
- Bioinformatics
- Biology (Cellular, Molecular, Developmental, Neural, Chemical, Evolutionary, etc.)
- Biomaterials
- Biostatistics
- Chemistry
- Clinical Research
- Ecology
- Environmental Health Science
- Epidemiological Science
- Genetic Counseling

- Health & Health Care Research
- Health Services Organization and Policy
- Human Genetics
- Immunology
- Industrial Health/Industrial Ecology
- Kinesiology
- Landscape Architecture
- Microbiology & Immunology
- Natural Resources/Conservation
- Neuroscience
- Nursing

- Nutritional Science
- Oral Health Sciences (Endodontics, Orthodontics, Periodontics, Prosthodontics, etc.)
- Pathology
- Pharmaceutical Sciences
- Pharmacology
- Pharmacy
- Physiology
- Spatial Analysis
- Sustainable Systems
- Toxicology

Physical Sciences & Engineering (Rackham Division 2)

- Applied Mechanics
- Applied Physics
- Applied Statistics
- Astronomy/Astrophysics
- Atmospheric, Oceanic & Space Sciences
- Biophysics
- Chemistry
- Complex Systems
- Computer Science & Engineering
- Construction Engineering & Management

- Design Science
- Engineering (Aerospace, Bio/Biomedical, Chemical, Civil, Electrical, Environmental, Financial, Industrial & Operations, Mechanical, Nuclear, Marine, etc.)
- Geology
- Macromolecular Science
- Materials Science
- Mathematics
- Mineralogy
- Naval Architecture

- Radiological Sciences
- Nuclear Science
- Oceanography: Physical
- Physics
- Robotics
- Scientific Computing
- Science, Technology & Public Policy
- Space & Planetary Physics
- Statistics
- Sustainable Systems
- Transportation & Logistics

Social Sciences (Rackham Division 3)

- Anthropology
- Area Ethnic, Cultural, Gender and Group Studies
- Asian Studies
- Business Administration
- Cognitive Science/Neuroscience
- Communication Studies
- Culture and Cognition
- Economics

- Education/Higher Education
- Education & Psychology
- Educational Studies
- Health Behavior & Health Education
- Health Service Organization & Policy
- Health Services Research
- History

- Information & Library Studies
- Political Science
- Psychology
- Public Administration
- Public Policy
- Sociology
- Urban & Regional Planning

Humanities & the Arts (Rackham Division 4)

- American Culture
- Architecture
- Ar
- English Language and Literature
- Foreign Languages and Literatures
- Classical Art & Archaeology
- Classical Studies
- Comparative Literature

- Creative Writing
- Dance
- Film Studies
- History of Art
- Judaic Studies Linguistics
- Medical & Biological Illustration
- Museum Studies

- Music (Composition, Education, Musicology, Performance, Theory, etc.)
- Philosophy
- Screen Arts and Cultures
- Theatre
- Women's Studies

¹ Excludes U-M professional degree programs by the same or similar names.

² Rackham Divisions are disciplinary groupings established by the Horace H. Rackham School of Graduate Studies.

Appendix C: Graduate and Professional Degree Programs at the University of Michigan

Graduate Academic Degree Programs (U-M refers to these as "Rackham degrees")

One or more U-M School or College offers the listed degrees.

- Master of Arts (A.M.)
- Master of Science (M.S.)
- Master of Science in Engineering (M.S.E.)
- Master of Fine Arts (M.F.A.)
- Master of Landscape Architecture (M.L.A.)

- Master of Public Policy (M.P.P.)
- Master of Public Administration (M.P.A.)
- Master of Urban and Regional Planning (M.U.P.)
- Doctor of Musical Arts (D.M.A. or A.Mus.D.)
- Doctor of Philosophy (Ph.D.)

Other Graduate Degree Programs (U-M often refers to these as "Non-Rackham degrees" and/or professional degrees.)

Taubman College of Architecture and Urban Planning (TAUP)

- Master of Architecture (M. Arch.)
- Master of Urban Design (M.U.D.)

Ross School of Business

- Master of Business Administration (M.B.A.)
- Master of Accounting (M.Acc.)
- Master of Supply Chain Management (M.S.C.M.)

College of Engineering

- Master of Engineering (M. Eng.)
 Concentration areas: Pharmaceutical Engineering,
 Construction Engineering and Management, Structural Engineering, Integrated Microsystems, Space Engineering, Manufacturing, Applied Climate,
 Automotive Engineering, Energy Systems
 Engineering, Global Automotive and Manufacturing,
 Robotics and Autonomous Vehicles
- Doctor of Engineering (D. Eng.)
 Concentration areas: Manufacturing, Engineering

Law School

- Master of Comparative Law (M.C.L.)
- Master of Laws (L.L.M.)
- Doctor of the Science of Law (S.J.D.)

Medical School

• Master's in Health Professions Education (M.H.P.E.)

School of Information

- Master of Science in Information (M.S.I.)
- Master of Applied Data Science (M.A.D.S.)

School of Music, Theatre & Dance

- Master of Music (M.M.)
 Concentrations areas: Chamber Music; Church Music; Collaborative Piano; Composition; Conducting:
 Band/Wind Ensemble, Choral, Orchestral; Early Keyboard Instruments; Improvisation; Keyboard Instruments; Music Education; Music Education with Certification; Performance; Piano Pedagogy and Performance; Wind Instruments.
- Specialist in Music (Spec.M.)
 Concentrations areas: Church Music;
 Ethnomusicology; Music Education; Performance;

School of Public Health

- Master of Public Health (M.P.H.)
- Master of Health Services Administration (M.H.S.A.)
- Doctor of Public Health (D.P.H.)

School of Social Work

Master of Social Work (M.S.W.)

Professional Degree Programs

School of Dentistry

• Doctor of Dental Surgery (D.D.S.)

Law School

• Juris Doctor (J.D.)

Medical School

• Doctor of Medicine (M.D.)

School of Nursing

Doctor of Nursing Practice (D.N.P.)

College of Pharmacy

• Doctor of Pharmacy (Pharm.D.)

Appendix D: U-M Ann Arbor Information Summary

Name of institution: University of Michigan City/State: Ann Arbor, Michigan

County: Washtenaw General telephone number: (734) 764-1817

Prospective students should contact the following offices for further information:

First-Years/Undergraduates
Office of Undergraduate Admissions
University of Michigan
1220 Student Activities Building
515 E. Jefferson St.

Ann Arbor, MI 48100 1216

Ann Arbor, MI 48109-1316 Ann Arbor, MI 48109-1070 Phone: (734) 764-7433 Phone: (734) 936-0740 Phone: (734) 764-8129 rackadmis@umich.edu

admissions.umich.edu /rackham.umich.edu/admissions

Year founded: 1817
President: Santa J. Ono
Year assumed office: 2022
Source of control: Public (State)
Student body: Coeducational

Degrees offered: Bachelor's, Post-bachelor's certificate, Master's, Post-master's certificate, Doctoral, Professional

Number of undergraduate schools/colleges/divisions: 12

Number of graduate schools/colleges/divisions:19

Academic year calendar: Trimester (limited summer courses available)

Institutional accreditation: As an institution, the University of Michigan is accredited by the Higher Learning Commission, a regional accreditation agency that accredits degree granting institutions of higher education based in the 19-state North Central region of the United States. An accreditation statement must be published in a unit's bulletin and any other widely distributed advertising and recruitment materials in which accreditation status is relevant and mentioned. Federal law requires that whenever an institution refers to its affiliation with the Commission, it will include the Commission's address and telephone number. The preferred statement is: "The University of Michigan is accredited by the Higher Learning Commission, 30 North LaSalle Street, Suite 2400, Chicago, Illinois 60602-2504. (800) 621-7440; (312) 263-0456; Fax: (312) 263-7462."

Year first accredited: 1913

Most recent accreditation: 2020 (Higher Learning Commission) accreditation.umich.edu/

Next scheduled evaluation: 2029-2030

Carnegie Classification: Doctoral / Research Universities - Extensive

Description of campus location:

Small city / Population: 119,980 (2019 census estimate)

44 miles from Detroit (nearest large city)

Appendix E: Glossary

AAU: American Association of Universities, a nonprofit association of 63 U.S. and two Canadian preeminent public and private research universities.

ACT: A standardized test designed to measure high school achievement and aid in the college admissions process.

Auxiliary activities: Essentially self-supporting activities primarily intended to furnish services to students, faculty and staff; examples include parking services, health care services to the public, residential services to students, and the athletic program.

Common Application: An undergraduate college admission application that students may use to apply to any of 488 member colleges and universities in the United States and various other countries. Its mission is to encourage the use of "holistic admission," a process that includes subjective factors gleaned from essays and recommendations alongside objective criteria such as class rank and standardized testing.

Constant Dollars: An adjustment made to financial values to account for the effects of inflation. Sometimes referred to as "real dollars".

Cost of Attendance Cost of attendance is the estimated full and reasonable cost of completing a full year as a full-time student and typically includes tuition and fees, books and supplies, room and board, personal costs and transportation. See Net Cost of Attendance.

Clinical faculty: At the University of Michigan, these non-tenure-track instructional faculty appointments emphasize clinical/practice and teaching skill.

Current Dollars: The value of dollars in the year they were received or paid without any adjustment for inflation. Sometimes referred to as "actual dollars".

Emeritus faculty: At the University of Michigan, regular and clinical instructional faculty, research professors, research scientists, librarians, curators, and archivists may, upon officially retiring from the University, be granted an emeritus or emerita title by the Board of Regents.

Expected Family Contribution (EFC): An estimate calculated according to a Federal formula of the amount that a student and his or her parents might be expected to contribute toward the costs of a college education. Once a student's EFC has been determined, the amount of federal, state, and institutional need-based aid the student is eligible to receive is calculated using the following equation: Cost of Attendance (minus) Expected Family Contribution (minus) Other Financial Resources (private scholarships, etc.) (equals) Eligibility for Need-Based Aid.

FTE: Full-time equivalent. A unit used to indicate the workload of an employed person or calculate the number of students or faculty members in a comparable or standardized way across institutions.

First generation student: An undergraduate student whose parents have not previously attended college at any level.

First-Years, First-Year Undergraduate: An undergraduate student who is attending college for the first time ever. This term is being used by many offices at the U-M, including the Office of Admissions, to replace the term "freshman" and "freshmen."

GPA: Grade point average. An indicator of past academic success that is requested as part of a student's application for admission.

General Fund: At the University of Michigan, the General Fund relies largely on student fees and state appropriations and pays for teaching, research, library services, student scholarships, fellowships, and maintenance and operation of physical properties, among other services.

Geographic origin: A student's geographic origin is defined according to the address used in the application for admission. The geographic origin of a student is similar, but not identical, to residency status.

Graduate Student Instructor (GSI): They are graduate students who help teach classes. GSIs act in different capacities depending on the class setup and professor preference. They can lead discussion sections, lead lectures, hold extra office hours, or be available for student help and advice.

Graduate Student Research Assistant (GSRA): A Graduate Student Research Assistantship (GSRA) is an appointment which may be provided to a student in good standing in a University of Michigan graduate degree program who performs personal research (including thesis or dissertation preparation) or who assists others performing research that is relevant to his or her academic goals.

Graduate Student Staff Assistant (GSSA): The GSSA is a graduate student whose employment is a part of a degree requirement or is otherwise considered academically relevant. GSSAs perform administrative, counseling or educational duties other than those of a GSI.

Glossary (19th Edition)

Grant Aid: Financial aid provided to students that is typically based on need.

Grant, research See research grant.

Indirect costs: Indirect costs are the real costs of University operations that are not readily assignable to a particular project. Officially known as Facilities and Administrative costs, these costs are determined by federal auditors under the guidelines of the Office of Management and Budget.

Indirect cost recovery: Payments for overhead costs received from a research sponsor.

In-state student: The informal designation of a student who pays the "resident" tuition rate. In broad terms, such students are permanent residents of the State of Michigan as demonstrated by the applicant's parents and/or the applicant or the applicant's spouse or partner holding permanent employment in the state.

Instructional faculty: Individuals at the University of Michigan involved in student instruction, excluding graduate student instructors. 'Regular instructional faculty' includes tenure track faculty, clinical instructional faculty, and lecturers. 'Supplemental instructional faculty' includes adjunct instructional faculty, adjunct clinical instructional faculty, and visiting instructional faculty.

National Postsecondary Student Aid Study (NPSAS): A comprehensive research dataset on financial aid provided by the federal government, the states, postsecondary institutions, employers, and private agencies, along with student demographic and enrollment data.

National Survey of Student Engagement (NSSE): A higher education survey administered by the Center for Postsecondary Research in the Indiana University School of Education NSSE annually collects information at hundreds of four-year colleges and universities about student participation in programs and activities that institutions provide for their learning and personal development. The results provide an estimate of how undergraduates spend their time and what they gain from attending college.

Net Cost of Attendance The net cost of attendance is defined as the sum of tuition and fees, room and board, books and supplies, and other expenses for a full-time first-year undergraduate minus the sum of need and merit-based grant aid (not including work-study programs or government subsidized loans). See Cost of Attendance.

Net Student Tuition/Fees: When used in the context of the University's operating revenues, this is the determined by subtracting scholarship aid from the tuition and fees paid by students.

Out-of-state student: The informal designation of a student who pays the "non-resident" tuition rate. In broad terms, such students are *not* permanent residents of the State of Michigan as demonstrated by the applicant's parents and/or the applicant or the applicant's spouse or partner holding permanent employment in another state or country.

Residency status: Residency status determines whether a student pays "in-state" or "out-of-state" tuition. Residency status is similar, but not identical, to geographic origin.

SAT: A standardized test designed to measure high school achievement and aid in the college admissions process.

Scholarship Aid: Financial aid provided to students, typically based on merit. (In some instances, scholarships may also have a need-based component.)

Selectivity: The percentage of applicants offered admission.

STEM: An acronym for fields related to science, technology, engineering and mathematics.

Technology transfer: The set of activities aimed at turning university research discoveries into products or processes with economic value.

Tenured/tenure-track faculty: Instructional faculty members who have either received tenure or who intend to be evaluated for tenure in the future.

U-M Health System: For the *Michigan Almanac*, this phrase refers collectively to the U-M Hospitals and Health Centers, Michigan Health Corporation, Medical School patient care-related activity and the Office of the Executive Vice President for Medical Affairs. This phrase *excludes* the Medical School, which is included as part of the Ann Arbor campus. NOTE: "Michigan Medicine" is the phrase used to cover U-M Hospitals, Health Centers, the Medical School and Medical Group Practice, Michigan Health Corp., and the Office of the Executive Vice President for Medical Affairs.

University of Michigan Asks You (UMAY): The name used at the U-M for its version of the Student Experience in the Research University (SERU) survey. The survey, designed to learn about undergraduate student experiences, is administered to all U-M undergraduates at the Ann Arbor campus. Other research institutions to their students administer similar surveys.

Yield: The percentage of admitted students who enroll.

Glossary (19th Edition) 168

Appendix E: Photography Captions and Credits

Cover: The relief details of the Ruthven lobby ceiling following renovation.

Photographer: Scott C. Soderberg

Page 2: On a stone bench near Angell Hall

Photographer: Austin Thomason

Page 8: Students in the Winter Garden at the Ross School of Business

Photographer: Scott C. Soderberg

Page 24: Student at work in Michigan Union

Photographer: Eric Bronson

Page 40: Spring 2016 Commencement.

Photographer: Scott C. Soderberg

Page 46: Student in darkened classroom

Photographer: Austin Thomason

Page 72: Dr. John Wei and Dr. Brent Hollenbeck

Photographer: Martin Vloet

Page 84: Lecture hall on campus

Photographer: Scott C. Soderberg

Page 98: U-M student teachers at an Ann Arbor middle school

Photographer: Austin Thomason

Page 110: At work in the U-M Herbarium.

Photographer: Eric Bronson

Page 124: U-M Museum of Art.

Photographer: Scott C. Soderberg

Page 136: Overlooking the Law School.

Photographer: Scott C. Soderberg

Page 148: Orion sculpture on Central Campus.

Photographer: Daryl Marshke

Page 166: Shakespeare in the Arb performance at Nichols Arboretum.

Photographer: Scott C. Soderberg

Photographs by Michigan Photography photography.umich.edu/