



Mayo Clinic and Arizona State University Alliance for Health Care

Dual-degree program: MD/MS

Science of Health Care Delivery

Training physicians of the future in the intellectual disciplines and practices of medicine and management

Physicians of the future are not only doctors, but also economists, administrators, and problem solvers working toward the common goal of improving patient care. Answering the nation's need to transform medical school education, Mayo Clinic Alix School of Medicine and Arizona State University's College of Health Solutions have created the new MD/MS dual-degree program.

The College of Health Solutions and Mayo Clinic Alix School of Medicine have joined together to offer Mayo students a unique opportunity to earn both an MD degree and a Master of Science degree in the science of health care delivery.

The science of health care delivery is the study and design of systems, processes, leadership and management used to optimize health care delivery and health for all. The MS degree provides students with the knowledge and competencies to contribute to and lead a patient-centered, safe and cost-effective health care system. Change in the health care system has accelerated in

the past five years and will continue to do so as it evolves to one based on value rather than volume. The program in the science of health care delivery prepares the future health care workforce – executives, administrators and physicians – to improve care delivery and the patient experience for better outcomes, quality, safety, service and cost.

Mayo Clinic Alix School of Medicine students are among the first to earn a certificate in the science of health care delivery upon graduation. Students can explore this field further and earn a master's degree in the science of health care delivery through ASU.

"The glory of medicine is that it is constantly moving forward, that there is always more to learn."

– William J. Mayo, M.D.

Mayo Clinic is a leading U.S. medical school for research

– U.S. News & World Report, 2018

#7 in in the U.S. for total research expenditures among universities without a medical school

– NSF Higher Education Research and Development Survey, 2018



Dual-degree program: MD/MS

Science of Health Care Delivery

The science of health care delivery dual-degree program provides Mayo Clinic Alix School of Medicine students with six critical areas of training:

- Leadership
- Population health
- Informatics
- Systems engineering
- Health care management
- Health economics and policy

Curriculum overview

The MS program in the science of health care delivery focuses on the study and design of systems, processes, leadership and management used to optimize health care delivery and health for all. This degree program provides students with knowledge and competencies to contribute to a patient-centered, safe and cost effective health care system, and is designed for individuals with an interest in a career in the health care industry.

Mayo Clinic Alix School of Medicine students accepted into the master's program at ASU would transfer 18 credits from Mayo Clinic Alix School of Medicine and apply them toward the 30 credits necessary for the ASU master's program. The grade point average for the student will be derived solely from the 12 credit hours of the master's curriculum completed at ASU. These 12 credit hours can be completed part-time online while students are in medical school.

Degree requirements

The MS in the science of health care delivery requires 30 credit hours, including a capstone course. Eighteen credits may be transferred from Mayo Clinic Alix School of Medicine course work.

Admission

Admission into ASU's MS in the science of health care delivery program is open to all students who have successfully matriculated into Mayo Clinic Alix School of Medicine.

Tuition

There is no transfer cost associated with the 18 credits earned through the Mayo Clinic Alix School of Medicine program. Once enrolled at ASU, students will complete the final 12 credit hours to attain the MS degree.

**#1 in the U.S.
for innovation**
ASU ahead of MIT and Stanford
— U.S. News & World Report, 7 years, 2016–2022



FAQs

Why should I pursue a Master of Science degree in the science of health care delivery from ASU?

A key driving force behind the development of the science of health care delivery field is the increasing complexity of our health care system. This complexity is perpetuated by a number of factors, including changes in population demographics, technological advances, unsustainable spending trends and the growing number of individuals struggling to manage preventable chronic disease across the United States. By taking a systems thinking and team-based approach to innovations in care, the science of health care delivery teaches the next generation of health care professionals how to achieve better results at lower costs in a complex and rapidly changing environment.

How does the program work?

Mayo Clinic Alix School of Medicine students will receive a Mayo/ASU certificate in the science of health care delivery as part of their medical degree. Students earning this certificate will then have the option to transfer their credits earned and complete the remaining course work to receive the MS in the science of health care delivery at ASU.

Where are the courses offered?

Courses are taught at the ASU Downtown Phoenix campus and online. Mayo Clinic Alix School of Medicine students often complete the degree online.

Whom should I contact for information?

All Mayo **Mayo** Clinic students must indicate their intention to apply for this program to:

Nicole Billingsley, MBA
Operations Manager,
Mayo Clinic Alix School of
Medicine
Billingsley.Nicole@mayo.edu

Alan Rawls, PhD
Executive Director of Clinical
Partnerships Office of
the Provost Arizona State
University
Alan.Rawls@asu.edu
(480) 965-5682

Dual-degree program: MD/JD

Juris Doctor



Training physicians of the future in the intellectual disciplines and practices of medicine and law

Physicians of the future are not only doctors, but also economists, administrators and problem-solvers working toward the common goal of improving patient care. Answering the nation's need to transform medical school education, Mayo Clinic Alix School of Medicine and the Sandra Day O'Connor College of Law at Arizona State University have created the Medical Doctor (MD)/Juris Doctor (JD) dual-degree program.

Combining your MD degree with a JD degree from ASU Law will prepare you for leadership roles in a variety of health care institutions, for developing health care policies for governmental agencies or nonprofit organizations, and for careers in medical and legal education. ASU Law is one of the nation's preeminent law schools, conveniently located on the college's Downtown Phoenix campus.

The JD provides students with the following knowledge and skills:

- Case law and statutory rules related to health care

- Legal research, analysis, reasoning and problem-solving
- Written and oral communication in the legal context
- Professional and ethical responsibilities to clients and the legal system

Curriculum overview

The MD/JD can be completed in six years. Medical students admitted into the program complete two years of courses at ASU Law, including one summer, then return to their medical studies. During their final year of medical studies, they complete a four-credit capstone project that ties together their medical and legal training. Courses cover legal doctrine and theory provide experiential learning opportunities and include a variety of courses related to health care, including the opportunity to do independent study projects with an MD/JD professor.

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— William J. Mayo, M.D.

Sandra Day O'Connor College of Law rankings

Best law school

#24
in the U.S.

— 2021 U.S. News & World Report

Health law

#22
in the U.S.

— 2021 U.S. News & World Report

Law school

#1
in Arizona
since 2010

— U.S. News & World Report

Public law school

#7
in the U.S.

— 2021 U.S. News & World Report

A top school for Health Law with an

A⁺
ranking

— preLaw magazine



Dual-degree program: MD/JD

Juris Doctor



"The MD/JD program gave me a deeper understanding of the structure of the legal system and creative ideas for how to fix the health care system. I have been able to navigate our laws and regulations, speak the same language as the people enforcing the

rules and conduct research on the intersection of law and medicine. I loved how individualized my training was at ASU."

— Rachel Lindor, MD, JD, instructor of
Emergency Medicine, Department of Emergency Medicine
Mayo Clinic College of Medicine



"My JD has enabled me to view health care in general and the practice of medicine in particular through a new lens. The degree opened doors, identified new opportunities and, most importantly, has allowed me to be a resource for colleagues and patients."

— John Shufeldt, MD, JD, chief medical officer,
San Carlos Apache Healthcare Co.

Degree requirements

Program length: Two years (including summer after the first year) Students must complete a total of 88 JD credit hours to graduate, including all of the following:

- 30 credits of prescribed course work during the first JD year
- Two to eight credits satisfying two writing requirements
- Six credits of experiential learning
- One four-credit capstone project to be completed during the final year of the MD degree
- Electives

Students will be awarded their JD at the same time they receive their MD.

Admission

Application deadline: March 1

Applicants must take the Law School Admission Test and submit exam scores, along with a completed application, to the Sandra Day O'Connor College of Law to be considered for admission to the JD program.

#1 in the U.S. for innovation

ASU ahead of MIT and Stanford

— U.S. News & World Report, 7 years, 2016–2022



FAQs

When do I need to apply? While our regular admission application deadline is March 1, we encourage people to apply as early as August 15 to help secure a seat. There is an upside in signaling your interest early. For instance, you will be invited to various events on campus to learn more about law school. We can tailor your experience by matching you with MD/JD alumni and advisors. We can also help you plan financially.

Do I have to take the LSAT?

Yes. We encourage you to take the Law School Admission Test no later than September or October. You must take the LSAT no later than February for regular admission on March 1. You will need to register with the Law School Admission Council Credential Assembly Service, complete the LSAC electronic application, and submit a complete application to ASU Law.

What kind of financial support is available?

Thanks to the generosity of our donors, we award millions of dollars in scholarships each year. All admitted students are automatically considered for merit-based scholarships and will be notified if additional information is required.

Whom should I contact for information?

All Mayo Clinic students must indicate their intention to apply for this program to:

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Operations Manager, Mayo Clinic Alix School of Medicine
Billingsley.Nicole@mayo.edu

Alan Rawls, PhD
Executive Director of Clinical Partnerships Office of the Provost Arizona State University
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Dual-degree program: MD/MS

Biomedical Diagnostics



Training physicians of the future in the intellectual disciplines and practices of medicine and diagnostics

Physicians of the future are not only doctors, but also economists, administrators and problem solvers working toward the common goal of improving patient care. Answering the nation's need to transform medical school education, Mayo Clinic Alix School of Medicine and Arizona State University's International School of Biomedical Diagnostics have created the new MD/MS dual-degree program.

The International School of Biomedical Diagnostics is a unique and innovative initiative in the exciting and fast-growing field of diagnostics. ASU, along with its academic partner Dublin City University and other industry partners, is creating a critical center of biomedical knowledge and innovation, committed to stimulating economic growth and improving the quality of life globally. Higher education is being transformed globally through new collaborations between public and private sectors. At the intersection of business and health care communities, the school's mission is to:

- Educate the next generation of health care executives to understand, appreciate and better utilize diagnostics in clinical medicine and scientific research
- Train students to be active, impactful and senior members of the health care and life science communities through course work and exposure to industry experts
- Positively impact the advancement of preventive health care and personalized medicine while lowering health care costs

Curriculum overview

The Master of Science in biomedical diagnostics degree is designed to give a broad perspective of the field with a focus on applied research and best practices in four central areas related to diagnostics. This will enable graduates to think critically and globally on all major aspects of biomedical diagnostics.

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— William J. Mayo, M.D.

These four core curricular areas provide the foundation for the degree program:

- 1. Technology of diagnostics** Explores instrument and assay development, biomedical engineering and diagnostic product development
- 2. Science of diagnostics** Focuses on underlying bioinformatics and biostatistical analysis, clinical trial design, regulatory systems and the technology behind imaging, pathology, molecular and sequencing technology
- 3. Business of diagnostics** Encompasses public and private health care finance and reimbursement, along with personalized health care, and includes the companion diagnostics
- 4. Application of diagnostics** Taught through case studies on critical diagnostics-related issues, including intellectual property, bioethics, clinical utility, intellectual property and smart systems, as well as modality integration and systems analysis companion diagnostics



Dual-degree program: MD/MS

Biomedical Diagnostics

Degree requirements

The MS degree requires 30 total credit hours, 27 of which will be taken at ASU, with the remaining three credits for an applied project that is part of Mayo Clinic Alix School of Medicine MD requirements.

Admission

Dual-degree program students will apply to ASU Graduate Admission Services for admission to the online MS in biomedical diagnostics degree during the spring semester of their second year Mayo Clinic Alix School of Medicine. If admitted, they will take time off from their medical course of study and begin the MS program in the fall of their third year in the dual-degree program. Students will return to complete the remainder of their program of study toward their MD degree in year four.

All students are required to meet general university admission requirements. No GRE entrance exam is required for admission to the MS in biomedical diagnostics.

Tuition

Program fees for Mayo Clinic Alix School of Medicine students are waived.

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— U.S. News & World Report, 7 years, 2016–2022



FAQs

Why should I pursue the dual degree in biomedical diagnostics?

Technological innovation continues to increase the importance of diagnostics in medicine, including prevention, etiology and therapy. Molecular (including multiple-omics) and imaging diagnostics are readily accelerating and impacting health and health care extensively.

How does the program work?

Students will complete the first two years with Mayo Clinic Alix School of Medicine. The third year of study in the dual MD/MS degree will be focused on biomedical diagnostics. The MS is offered entirely online in a 7 1/2-week format through state-of-the-art delivery. Upon completion of the biomedical diagnostics course work, students will return to their MD studies to complete both degrees.

Whom should I contact for information?

All Mayo Clinic students must indicate their intention to apply for this program to:

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Alan Rawls, PhD
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Dual-degree program: MD/MAS

Health Informatics



Training physicians of the future in the intellectual disciplines and practices of medicine and technology

Physicians of the future are not only doctors, but also economists, administrators and problem solvers working toward the common goal of improving patient care. Answering the nation's need to transform medical school education, Mayo Clinic Alix School of Medicine and Arizona State University's Department of Biomedical Informatics have created the new MD/MAS dual-degree program.

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ASU's Master of Advanced Study in health informatics, offered online through the Department of Biomedical Informatics, is designed to offer an opportunity to earn a master's level degree in the effective use of information technology, data science and knowledge representation to impact health and health care.

Clinical informaticists' work includes a broad range of improvements to patient care, such as enhancing electronic health records systems, clinical decision support, data interpretation, knowledge management and its effective delivery and human computer interaction.

This field requires close collaboration among clinicians, biomedical and computational scientists, knowledge management professionals, educators and health care consumers.

Curriculum overview

This dynamic curriculum was developed through consultation with Mayo Clinic clinical informatics physicians and is taught by expert faculty from the ASU Department of Biomedical Informatics and industry experts in the field. The curriculum includes four required core courses, five elective courses and an applied project. Fewer required courses allow students to customize their learning experience. The unique and important electives include courses such as workflow analytics and redesign, population health management and analytics, knowledge management and human factors engineering.

**#1 in the U.S.
fastest-growing
research university**

with \$100 million+ in annual research expenditures

**ahead of Harvard,
Yale and Duke**

— NSF Higher Education
Research and Development
Survey, 2015



Dual-degree program: MD/MAS

Health Informatics



Degree requirements

The MAS degree requires 30 total credit hours, 27 of which will be taken at ASU, with the remaining three credits for an applied project that is part of the Mayo Clinic Alix School of Medicine MD requirements.

Admission

Dual-degree program students will apply to ASU Graduate Admission Services for admission to the online MAS in health informatics degree during the spring semester of their second year in the Mayo Clinic Alix School of Medicine MD program. If admitted, students will take time off from their medical course of study and begin the MAS program in the fall of their third year in the dual-degree program. Students will return to complete the remainder of their program of study toward their MD degree in year four.

All students are required to meet general university admission requirements. No GRE entrance exam is required for admission to the MAS in health informatics.

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— U.S. News & World Report, 7 years, 2016–2022



FAQs

Why should I pursue a dual degree in health informatics?

The dynamic health technology industry is evolving rapidly and is a key component for value-based care and innovations in health. This expertise can position students for leadership roles in future technology advancements that drive the industry and health care.

How does the program work?

Students will complete the first two years with the Mayo Clinic Alix School of Medicine. The third year of study in the dual MD/MAS degree will be focused on health informatics. The MAS is offered entirely online in a 7 ½-week format through state-of-the-art delivery. Upon completion of health informatics coursework, students will return to their MD studies to complete both degrees.

Whom should I contact for information?

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Dual-degree program: MD/MMC

Mass Communication



Training physicians of the future in the intellectual disciplines and practices of medicine and communication

Physicians of the future are not only doctors, but also communicators, administrators and problem solvers working toward the common goal of improving patient care. Answering the nation's need to transform medical school education, Mayo Clinic Alix School of Medicine and Arizona State University's Walter Cronkite School of Journalism and Mass Communication have created the new MD/MMC dual-degree program.

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— William J. Mayo, M.D.

ASU's renowned Cronkite School offers unparalleled learning opportunities through its master's degree programs designed to prepare students for today's rapidly evolving media landscape.

The Cronkite School's Master of Mass Communication provides real-world, practical experiences through its professional immersion programs under the guidance of award-winning journalists and communicators.

Located in the heart of downtown Phoenix, the nation's fifth-largest city, the Cronkite School is the home of Arizona PBS, the largest media outlet operated by a journalism school in the world.

Curriculum overview

The graduate program begins with a "boot camp" experience during which students learn the reporting skills, values and principles embodied by the late Walter Cronkite, who was the school's guiding light for three decades. Students learn how to navigate the 21st-century media environment through advanced classes and a symposium specifically focused on the future of journalism. The program culminates with an in-depth project in one of the school's signature professional newsrooms in Phoenix, AZ Los Angeles, CA or Washington, D.C.

**#1 in the U.S.
best record in the
Society of Professional
Journalists' "Mark of
Excellence" awards
over the past 15 years**

— Society of Professional Journalists and Development Survey, 2015



Dual-degree program: MD/MMC

Mass Communication



**#1 in the U.S.
for innovation**
ASU ahead of MIT and Stanford
— U.S. News & World Report, 7 years, 2016–2022



Degree requirements

The program is comprised of 36 total credit hours spread over one academic year, consisting of three semesters.

Admission

To be considered for admission to the Cronkite School, students must have at least a 3.0 (on a 4.0 scale) grade-point average in the last 60 semester hours of undergraduate coursework. The GRE requirement is waived. An MCAT score will be accepted in its place.

All students are required to meet general university admission requirements.

Application deadline: January 15

Fellowships

The Cronkite School has made available two fellowships to Mayo Clinic Alix School of Medicine students to cover the full cost of tuition for this program.

FAQs

How is the Cronkite School's master's program different?

The program is professionally focused, multimedia-driven and hands-on, designed to give students the experience and skills they need to excel in a rapidly evolving media and communications industry.

The Cronkite School has strong relationships with major national media companies that regularly hire graduates. The school's career services department annually places more than 500 students in internships at more than 225 companies.

Whom should I contact for information?

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Mayo Clinic and Arizona State University Alliance for Health Care

Dual-degree program: MD/MBA

Business Administration

Training physicians of the future in the intellectual disciplines and practices of medicine and management

Physicians of the future are not only doctors, but also economists, administrators and problem solvers working toward the common goal of improving patient care. Answering the nation's need to transform medical school education, Mayo Clinic Alix School of Medicine and Arizona State University's W. P. Carey School of Business have created the new MD/MBA dual-degree program.

This unique curriculum is designed to cultivate a learning environment that will train you to become a physician-leader prepared to make meaningful and impactful contributions to the health and well-being of individuals, as well as society as a whole.

Structured to be completed in five years, the MD/MBA dual-degree program integrates the expertise of Mayo Clinic Alix School of Medicine in patient care and biomedical advancements with the prowess of the W. P. Carey School of Business's entrepreneurial approach to learning and groundbreaking research. As a result, you will learn to dissect complex business problems to inform pragmatic multidisciplinary solutions. This visionary program prepares you to become a leader in the business of medicine and the science of health care delivery.

Curriculum overview

The integrated curriculum of the MD/MBA centers on decision-making with data analytics, and opportunities for self-transformation through executive connections, Interdisciplinary Applied Learning Labs and Future World of Work. Delivered by internationally recognized faculty with a wealth of cumulative experience, scholarship and expertise, the dual-degree program is continuously adapted to ensure you are provided the tools and requisite knowledge base from which you will emerge as a leader in both schools of thought.

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— William J. Mayo, M.D.

W. P. Carey School of Business rankings

Full-time MBA

#31

— Poets & Quants, 2019

Highest return on investment, full-time MBA

#5

— U.S. News & World Report, 2021

Full-time MBA programs

#35

— U.S. News & World Report, 2021



Dual-degree program: MD/MBA

Business Administration

Degree requirements

You are required to complete 60 credit hours for ASU's MBA degree. A total of 17 credit hours will be shared between the two programs.

You must commit one academic year, consisting of two semesters, to complete the MBA requirements of this dual-degree program. Below is a timeline for achieving the dual degrees:

- First and second year: Mayo Clinic Alix School of Medicine (MD) program
- Spring of second year: apply for admission to the full-time W. P. Carey MBA program
- Third year: attend MBA program
- Fourth and fifth years: Mayo Clinic Alix School of Medicine (MD) program. A total of 17 credits of shared hours with the MBA program will be completed during this period.

These 17 hour credit hours will come from the intersession clerkships you will take during your fourth and fifth year at Mayo Clinic Alix School of Medicine, following the completion of the MBA curriculum and under the guidance of Mayo Clinic faculty. Your intersession clerkships must focus on topics that integrate business and medicine; medical economics is one example. Your MBA degree will not be conferred by ASU until this is completed.

Admission

You will apply to the MD/MBA program through the Mayo Clinic Alix School of Medicine. The admission requirements for the dual MD/MBA program will match the prerequisites of the stand-alone MBA programs in most respects. The GMAT exam is optional, and you must meet the admission requirements of the university and ASU Graduate College.

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FAQs

Why should I pursue a dual degree in business administration from ASU? The W. P. Carey School of Business MBA program underscores the shift in your role as a physician to become a leader in the business of medicine and the science of health care and health care delivery

How does the program work? In the combined MD/MBA program, you will study at both Mayo Clinic Alix School of Medicine and Arizona State University in a synergistic program that will spread your learning of medicine and development of business acumen over five years. The first two years of medical school will be completed prior to your full-time attendance at Arizona State University for one year. You will return to Mayo Clinic Alix School of Medicine to conclude your medical studies upon successful completion of the MBA core curriculum.

What are the admission requirements? Admission requirements for the concurrent MD/MBA program and ASU's stand-alone MBA programs are primarily the same. You must apply to the ASU Graduate College for admission. The GMAT exam is optional.

What are the mandatory courses for the MD/MBA? Sixty credit hours are required to complete the MBA. The MBA program requirements must be completed within two semesters of one academic year. A total of 17 credit hours will be shared between the two programs.

Whom should I contact for information? All Mayo Clinic students must indicate their intention to apply for this program to:

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