Doctor of Medicine, M.D.

Requirements

The Doctor of Medicine is a four-year program that prepares students to practice primary care medicine and to pursue further education and training in specialized areas of medicine. The program admits 152 new students each year.

The M.D. curriculum is built on a triple-helix model whose three strands extend through all four years of medical school: the clinical and professional skills strand, the mechanisms of health and disease strand, and the medicine and society strand.

Clinical experiences begin during the first few weeks of medical school, and clinical clerkships start after just three semesters of preclinical instruction. By the end of the fifth semester, students have completed all of their core requirements and have the remaining three semesters to tailor their educational experience in preparation for their selected specialty.

Students complete in-depth clinical coursework and serve clinical clerkships primarily at University of Iowa Hospitals & Clinics, the Iowa City VA Health Care System, and the Des Moines Area Medical Education Consortium. Students also may have opportunities to gain experience in private medical offices and community hospitals.

The M.D. program is a full-time, four-year program; thus, students are required to pay a minimum of eight semesters of full-time tuition. At the conclusion of medical school, students will match into a residency program and complete their training in a chosen specialty.

Requirements for Students Completing Phase II Core, 2021 Calendar Year

Preclinical Curriculum (Phase I)

The first three semesters of the M.D. program present an integrated core of sciences basic to the study of medicine. They also introduce students to the foundations of clinical practice.

Coursework includes human anatomy, foundations of cellular life, clinical and professional skills (a three-course series), medicine and society (a three-course series), and mechanisms of health and disease (a five-course series). Each of these courses is described below.

Some elective courses are available to students during the first and second years, normally for 1 or 2 s.h. of credit. Topics include areas not specifically covered in the regular curriculum and areas related to medical practice and the role of the physician. Courses vary from year to year, but typical subject areas are global health issues, U.S. health care systems, and community health outreach.

The M.D. program’s preclinical curriculum requires the following coursework.

First Semester

ACB:8101 Medical Gross Human Anatomy: complete dissection of the body with regional emphasis stressing relationships to the living system; clinically relevant areas of radiologic imaging, surface anatomy, embryology, and clinical correlations; anatomical knowledge through lectures, small group work, and independent activities.

MED:8121 Clinical and Professional Skills I: introduction to concepts of clinical reasoning, communication, physical examination, and evidence-based clinical practice; principles of biomedical ethics; early clinical interactions and placement of classroom experiences into the context of patient care through the Early Clinical Experiences (ECE) program; interactions with students from other health sciences colleges to explore the interprofessional approach to caring for patients.

MED:8122 Medicine and Society I: delivery of individual disease prevention/health promotion services; introduction to social determinants of health; influence and impact of culture and community on health care; community resources; students apply health and risk assessment to individual patients and to themselves.

MED:8123 Foundations of Cellular Life: genetics, embryology, molecular biology, biochemistry, cell biology and histology; molecular events required for cellular life; how cells grow and interact to form basic tissues of the human body; framework necessary for exploring the mechanisms of health and disease.

MED:8124 Mechanisms of Health and Disease I: normal and healthy processes within and among mechanisms of oxygenation, metabolism, and genetics/development.

Second Semester

MED:8131 Clinical and Professional Skills II: reinforcement of clinical reasoning concepts introduced in MED:8121 and introduction of additional concepts; application of concepts through interactions with standardized patients and through clinical visits; varied experiences help students gain a deeper appreciation for issues in biomedical ethics; strengths and barriers involved in providing comprehensive interdisciplinary patient care.

MED:8132 Medicine and Society II: knowledge and skills related to health promotion and disease prevention from a medicine and society perspective, including impact of behavior, environment, culture, and socioeconomics; identification of major public health problems associated with mechanisms of health and disease; focus on public health and epidemiology, with attention to screening, global health, and environmental hazards.

MED:8133 Mechanisms of Health and Disease II: normal and healthy processes within and among mechanisms of immunology/inflammation, locomotion/integument, and neuropsychiatry.

MED:8134 Mechanisms of Health and Disease III: abnormalities or disruptions leading to disease within and among mechanisms of oxygenation, metabolism, and genetics/development.

Third Semester

MED:8221 Clinical and Professional Skills III: advanced clinical reasoning skills gained through focused patient encounters and interactions with special patient populations; emphasis on students’ ability to integrate and use concepts from the
M.D. curricular strands that are required for cost-conscious, patient-centered, interdisciplinary care.

MED:8222 Medicine and Society III: health services organization and delivery, with emphasis on community dimensions of medical practice and patient safety.

MED:8223 Mechanisms of Health and Disease IV: abnormalities or disruptions leading to disease within and among mechanisms of immunology/inflammation, locomotion/ integument, and neuropsychiatry.

MED:8224 Mechanisms of Health and Disease Keystone: transition from classroom instruction in MED:8124, MED:8133, MED:8134, and MED:8223 to clinical practice; foundational information from those courses approached from the perspective of common clinic encounters; diagnostic and management decisions about common important clinical problems using the foundational knowledge gained from those courses.

Clinical Curriculum (Phase II and III)

Students complete one week of skills training in MED:8320 Transition to Clerkships prior to the start of clinical clerkships. The two-and-a-half year clinical component of the medical curriculum is comprised of supervised hands-on clinical training at the bedside in in-patient units, in outpatient clinics, and in communities throughout the state. In contrast to the preclinical semesters, the clinical years vary according to a student’s individual needs. This period of training begins in January of the second year with 44 weeks of core clerkships (Phase II). Students then enter various pathways where they complete a minimum of 10 weeks of selectives, four weeks of emergency or critical medicine, one four-week subinternship, and 32 weeks of advanced electives (Phase III).

After completing the core clerkships, students must successfully complete Step 1 of the United States Medical Licensing Examination (USMLE) before they may be promoted to the pathways component of the curriculum. Students take Step 2 of the USMLE during their fourth year of the M.D. program, and must pass the exam in order to graduate.

Primary venues for clinical training of medical students include University of Iowa Hospitals & Clinics, the Iowa City VA Health Care System, and the Des Moines Area Medical Education Consortium. Students also participate in the family practice preceptorship and the community-based primary care clerkship, which are off-campus rotations. Other courses also may be assigned to off-campus sites.

The M.D. program’s clinical curriculum requires the following clerkships and selectives.

Generalist Core (Phase II)

M.D. students complete the generalist core during the fourth and fifth semesters. It consists of the following 42-44 weeks of clerkships.

Selectives

M.D. students complete 10 weeks of selectives chosen from the following.

Advanced Required Clerkships (Phase III)

M.D. students complete the following required clerkships and other work during the three advanced clinical-year semesters. In addition to the clerkships, students complete training modules in advanced clinical topics that include MED:8470 Self-Directed Learning in Advanced Clinical Topics. They also are required to complete the Advanced Objective Structured Clinical Examination (OSCE), administered by the college in a student’s final semester.

Requirements for Students Completing Phase II Core, Spring 2022

Preclinical Curriculum (Phase I)

The first three semesters of the M.D. program present an integrated core of sciences basic to the study of medicine. They also introduce students to the foundations of clinical practice.

Coursework includes human anatomy, foundations of cellular life, clinical and professional skills (a three-course series), medicine and society (a three-course series), and mechanisms of health and disease (a five-course series). Each of these courses is described below.

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Third Semester
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<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>Internal Medicine Block</td>
<td></td>
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</tr>
<tr>
<td>IM:8310</td>
<td>Internal Medicine (10 weeks)</td>
<td>10</td>
</tr>
<tr>
<td>Family Medicine/Pediatrics Block</td>
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<td></td>
</tr>
<tr>
<td>FAM:8302</td>
<td>Family and Community Medicine (6 weeks)</td>
<td>6</td>
</tr>
<tr>
<td>PEDS:8301</td>
<td>Clinical Pediatrics (6 weeks)</td>
<td>6</td>
</tr>
<tr>
<td>Obstetrics and Gynecology/Surgery Block</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
OBG:8301 Clinical Obstetrics and Gynecology (6 weeks) 6
SURG:8301 Clinical Surgery (6 weeks) 6

**Neurology/Psychiatry/Emergency Medicine Block**

EM:8301 Core Emergency Medicine (2 weeks) 2
NEUR:8301 Clinical Neurology (4 weeks) 4
PSYC:8301 Clinical Psychiatry (4 weeks) 4

**Selectives**

M.D. students complete 10 weeks of selectives chosen from the following.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ANES:8301</td>
<td>Clinical Anesthesia (2 weeks)</td>
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</tr>
<tr>
<td>DERM:8301</td>
<td>Clinical Dermatology (2 weeks)</td>
<td>2</td>
</tr>
<tr>
<td>OPHT:8301</td>
<td>Clinical Ophthalmology (2 weeks)</td>
<td>2</td>
</tr>
<tr>
<td>ORTH:8301</td>
<td>Clinical Orthopedics (2 weeks)</td>
<td>2</td>
</tr>
<tr>
<td>OTO:8301</td>
<td>Clinical Otolaryngology (2 weeks)</td>
<td>2</td>
</tr>
<tr>
<td>RAD:8301</td>
<td>Clinical Radiology (2 weeks)</td>
<td>2</td>
</tr>
<tr>
<td>URO:8301</td>
<td>Clinical Urology (2 weeks)</td>
<td>2</td>
</tr>
</tbody>
</table>

**Advanced Required Clerkships (Phase III)**

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<thead>
<tr>
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<th>Title</th>
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<tbody>
<tr>
<td>Critical care medicine (4 weeks)</td>
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<td></td>
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<tr>
<td>Advanced inpatient subinternship (4 weeks)</td>
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<tr>
<td>Advanced electives (total of 32 weeks)</td>
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