VINUNIVERSITY

CURRICULUM FRAMEWORK

MEDICAL DOCTOR PROGRAM

PROGRAM CODE: [7720101]

Applicable for cohort 2020 - 2026 from Academic Year 2025 - 2026

(Decision 448/2025/QD-VUNI dated August 11th 2025 by the Provost of VinUniversity)

This Curriculum Framework has been reviewed and validated by
The University of Pennsylvania

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1. VINUNI GENERIC GRADUATE ATTRIBUTES

Generic graduate attributes are a set of skills, attributes, and values that all learners should achieve regardless of discipline or field of study; should be measurable and broad. The five Generic Graduate Attributes for VinUni, framed around the EXCEL Model, are listed as below:

- E: Empathy – The ability to understand what someone else might be thinking or feeling, without judgment, and the desire to help to make a better world.
- X: Exceptional Ability – Exceptional capabilities and competencies that are proven determinants of future success.
- C: Creativity – The ability to perceive the world in new ways, to find hidden patterns, to make connections between seemingly unrelated phenomena, and to generate solutions and turning imaginative, new ideas into reality.
- E: Entrepreneurial Spirit – The way of thinking that enables people to seek challenges, be resilient in overcoming them, make informed and quick decisions, accept responsibility, adapt and persist in the face of adversity, and create value and impact in the society.
- L: Leadership Mindset – The ability to influence and motivate people to maximize their efforts towards achieving a common goal.

2. PROGRAM OVERVIEW

2.1. Program Description

Name of the degree	Doctor of Medicine
Name of the program	Medical Doctor Program
Program Code	7720101
Length of Program	6 years
Mode of Delivery	Full-time
Language of Delivery	English
Total credits	228 credits
Home College	College of Health Sciences

2.2. Program Mission and Vision

Mission: Our mission is to develop excellent, professional, dedicated, compassionate physicians, committed to lifelong learning, innovation, scholarship, and leadership to address society's diverse and evolving healthcare needs to the highest standard.

Vision: To be an excellent internationally recognized medical program through quality education, transformative research, and improving population health and well-being.

2.3. Professional Competency Standards

Competency standards that help the school measure the values, attributes, skills, and knowledge of our medical students have been developed and are spread out over 6 major domains. Our curriculum will ensure that students achieve competencies of the six domains as follows:

- **DOMAIN 1: COMPETENCE IN PROFESSIONAL PRACTICE**
  General practitioners shall have a professional practicing manner according to moral and legal standards and shall respect the variety of culture.
- **DOMAIN 2: COMPETENCE IN APPLICATION OF MEDICAL KNOWLEDGE**
  General practitioners shall have ability to apply the knowledge about basic science and basic medicine, pathology, and social and medical studies as the rationale for identifying, explaining, and resolving the problems and transmit to individuals, groups of individuals and community about health conditions.
- **DOMAIN 3: COMPETENCE IN MEDICAL CARE**
  General practitioners shall have the ability to resolve a normal demand for medical care safely, promptly, economically, and effectively depending on scientific evidence and conform to the real conditions.
- **DOMAIN 4: COMPETENCE IN COMMUNICATION AND COOPERATION**
  General practitioners shall have the ability to communicate effectively with patients and their family, their colleagues, and the community.
- **DOMAIN 5: PRACTICE-BASED LEARNING AND IMPROVEMENT**
  Requires General Practitioners demonstrate their care of patients, locate, and appraise scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning.
- **DOMAIN 6: SYSTEMS-BASED PRACTICE**
  Requires General practitioners to demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

2.4. Program Educational Objectives

The Medical Doctor Program is aimed to produce graduates who are able to:

1. Practice medicine with compliance to the national ethical standards and legal requirements, demonstrating proficiency in clinical skills and knowledge to provide safe, effective, and compassionate patient care.
2. Engage in continuous professional development and reflective practice, collaborating effectively within interprofessional teams to improve patient outcomes and healthcare systems.
3. Exhibit leadership and an entrepreneurial mindset, utilizing evidence-based practices and state-of-the-art technology to drive innovation and improvements in healthcare delivery both locally and globally.

2.5. Program Learning Outcomes (PLOs)

At the end of the program, a student is able to:

PROGRAM LEARNING OUTCOMES (PLOs)	PERFORMANCE INDICATORS (PIs)
I. KNOWLEDGE	
I.1. General Knowledge	
PLO 1: Apply foundational knowledge of politics, law, arts, humanities, sustainability, cross-cultural understanding, and globalization to personal and professional development as well as to innovation.	**PI 1.1: Apply** foundational knowledge of politics, law and regulations to personal and professional development.
	PI 1.2: Apply foundational knowledge of sustainability, cross-cultures, and globalization towards innovation in emerging local and global challenges.
	PI 1.3: Apply foundational knowledge of the arts and humanities to personal and professional development.
I.2. Professional Knowledge	
PLO 2: Systematize knowledge in biomedical, clinical, epidemiological and social-behavioral sciences into clinical practice and research.	**PI 2.1: Appraise** knowledge of the biomedical sciences in clinical practice decision-making.
	PI 2.2: Recommend appropriate steps in clinical practice decision-making using evidence-based approaches.
	PI 2.3: Appraise epidemiological principles in clinical practice and research.
	PI 2.4: Integrate social-behavioral science insights into clinical practice and research.
PLO 3: Develop evidence-based approaches for the diagnosis, management, and prevention of health conditions, as well as for continuous improvement into clinical practice.	**PI 3.1: Diagnose** health conditions accurately using evidence-based approaches.
	PI 3.2: Manage health conditions effectively using evidence-based approaches.
	PI 3.3: Design health promotion strategies using evidence-based approaches.
	PI 3.4: Formulate continuous improvement plans in clinical practice using evidence-based approaches.
II. SKILLS	
II. 1. Professional Skills	
PLO 4 [Clinical Skills]: Master history-taking, physical examination, procedural skills, clinical reasoning, interpretation of diagnostic tests, and healthcare management.	**PI 4.1: Adapt** history-taking skills to ensure accurate and comprehensive clinical evaluation.
	PI 4.2: Adapt physical examination skills to ensure accurate and comprehensive clinical evaluation.
	PI 4.3: Perform basic/essential procedure skills relevant to patient care correctly and safely.
	PI 4.4: Originate clinical reasoning in patient care through the synthesis of history-taking, physical examination findings, and interpretation of diagnostic tests.
	PI 4.5: Customize healthcare management plan through clinical reasoning from the synthesis of clinical data.
PLO 5 [Patient Management Skills]: Formulate safe, time-efficient, cost-	**PI 5.1: Formulate** safe decisions in health care through understanding of patient safety standards.

effective, and patient-centered decisions in health care.	**PI 5.2: Construct** time-efficient decisions to optimize patient care through the principle of medical prioritization.
	PI 5.3: Construct cost-effective decisions to optimize patient care through understanding of available resources.
	PI 5.4: Formulate patient-centered decisions in health care through effective communication and upholding respect for patient autonomy.
PLO 6 [Research Skills]: Create research and a plan addressing healthcare-related questions in clinical and/or public health practice.	**PI 6.1: Appraise** scientific literature in healthcare-related questions.
	PI 6.2: Create a research protocol to answer healthcare-related questions.
	PI 6.3: Combine data collection and analysis skills in research implementation.
	PI 6.4: Create a plan for improved clinical and/or public health practices based on scientific literature.
II.2. General Skills	
PLO 7 [Teamwork and Leadership Skills, Communication Skills]: Demonstrate effective communication and collaboration with colleagues, interprofessional team members, patients, and their families grounded in mutual respect, empathy, integrity, and honesty.	**PI 7.1: Demonstrate** leadership skills including oversight in an interprofessional teams.
	PI 7.2: Demonstrate collaborative skills with interprofessional team members to enhance patient safety and quality improvement.
	PI 7.3: Demonstrate effective communication skills with patients and families, fostering an environment of mutual respect, empathy, integrity and honesty in healthcare delivery.
III. ATTITUDE	
PLO 8 [Ethics, Responsibility]: Adhere to the ethical and professional standards and legal regulations in the practice of medicine.	**8.1. Adhere** to professional standards in clinical practice.
	8.2. Adhere to legal regulations in medical practice.
	8.3. Display the values of diversity, equity, inclusion, and anti-racism into personal and professional conduct~~.~~
	8.4: Advocate for individuals, patients, healthcare systems, and/or communities based on social, cultural, and/or contextual factors toward improved healthcare outcomes.
PLO 9 [Life-long Learning]: Integrate reflective practices and self-evaluation in personal and professional development.	**9.1:** Continuously **engage** in reflection-in-actionself reflection toward indentification of personal strengths and areas for professional improvement and a commitment to lifelong learning.
	9.2: Formulate personal development plans based on reflective practices and self-evaluation toward personal and professional development
PLO 10 [Entrepreneurship and Leadership Mindset]: Demonstrate entrepreneurial and leadership mindsets in professional development and in healthcare settings.	**10.1: Demonstrate** entrepreneurial and leadership mindsets in professional development.
	10.2: Demonstrate entrepreneurial and leadership mindsets in healthcare settings.

3. CURRICULUM STRUCTURE

3.1. Curriculum Composition

No	Curriculum Composition	Total	Credit		Credit Distribution (%/Total Credits)
			T	P	
1	**General Education**	**25**	**25**	**0**	**11%**
1.1	General Education	25	25	0	11%
1.2	Co-curricular Learning	Non-credit			0%
2	**Professional Education**	**203**	**87**	**116**	**89%**
2.1	Basic Sciences	11	9	2	5%
2.2	Pre-clinical Courses	77.5	44.5	33	34%
2.3	Clinical Courses	94	26	68	41%
2.4	Elective Courses	11	3	8	5%
2.5	Scholarly Project	4	1	3	2%
2.6	Graduation Module	5.5	3.5	2	2%
Total		**228**	**112**	**116**	**100%**

Important Note:

International students are exempted from National Defense Education. However, they are still required to take ideology courses, including: History of the Communist Party, Ho Chi Minh Ideology, Scientific Socialism, Marxism-Leninism Political Economy, Marxism-Leninism Philosophy (In line with Decision No. 494/QĐ-TTg, issued on June 24, 2002, by the Prime Minister).

3.2. Courses and Credit Distribution by Courses

GENERAL EDUCATION								
No	**Year**	**Course code**	**Courses / Educational Units**	**Total**	**Credit**		**Grading system***	**Pre-requisite**
					T	**P**		
General Education								
1	Year 1	HASS1010	Marxism-Leninism Philosophy (Philosophy Science and Society)	3	3	0	L	
2	Year 1	HASS1020	Marxism-Leninism Political Economy (Global Political Economy)	2	2	0	L	
3	Year 1	HASS1030	Scientific Socialism (Politics and Social Change)	2	2	0	L	
4	Year 1	HASS1050	History of the Communist Party (Vietnam History and Culture I)	2	2	0	L	
5	Year 1	HASS1041	Ho Chi Minh Ideology (Vietnam History and Culture II)	2	2	0	L	
6	Year 1	LEAD1020	Organizational Behavior	2	2	0	L	
7	Year 1	ENTR1020	Agile Innovation	2	2	0	L	
8	Year 1	ENGL1010	Academic English 1	3	3	0	L	
9	Year 1	ENGL1020	Academic English 2	3	3	0	L	
10	Year 3	ARTS1020A/B	Arts (Medical Humanities)	2	2	0	P/F	MEDI1040
11	Year 1	LAW1010	Introduction to Law	2	2	0	L	
Total				**25**	**25**	**0**		
Co-Curricular								
12	Year 1	VCOR1010A/B	First Year Experience - OASIS	Non-credit			P/F	
13	Year 1	VCOR1021	Healthy Lifestyle 1				P/F	
14	Year 1	VCOR1022	Healthy Lifestyle 2				P/F	
15	Year 1	ENTR1010	Entrepreneurship Initiatives				P/F	

16	Year 1	GLEX1010	Global Experience		P/F	
17	Year 1	COSL1010	Community Service Learning		P/F	
18	Year 1	LEAD1030	Leadership and Teambuilding Boot Camp		P/F	
19	Year 1	VCOR1030	National Defense Education (for Vietnamese citizen only)		P/F	

PROFESSIONAL EDUCATION

No	Year	Course code	Courses / Educational Units	Total	Credit		Grading system*	Pre-requisite
					T	P		
Basic Sciences								
20	Year 1	BIOL1011	Biology	2.5	2	0.5	L	
21	Year 1	PHYS1011	Biophysics	3.5	3	0.5	L	
22	Year 1	CHEM1021	Chemistry	2.5	2	0.5	L	
23	Year 1	BIOL1020	Bioinformatics	1	1	0	L	
24	Year 2	MEDI1090	Cell and Molecular Biology	1.5	1	0.5	L	BIOL1011, PHYS1011, CHEM1021
Total				**11**	**9**	**2**		
Pre-clinical Courses								
25	Year 1	MEDI1010A/B	Introduction to Professionalism in Medicine	3.5	1.5	2	L	
26	Year 2	MEDI1020	Fundamentals of Population & Health Research 1	2	1	1	L	BIOL1020
27	Year 2	MEDI1050	Human Anatomy & Development 1	7	4	3	L	BIOL1011, PHYS1011, CHEM1021
28	Year 2	MEDI1060	Human Body Structure and Functions 2	7	3	4	L	BIOL1011, PHYS1011, CHEM1021
29	Year 2	MEDI1070	Biochemistry	4.5	3	1.5	L	BIOL1011, PHYS1011, CHEM1021
30	Year 2	MEDI1080	Genetics	3	2	1	L	BIOL1011, PHYS1011, CHEM1021

31	Year 2	MEDI2010	Immunology	3	2	1	L	BIOL1011, PHYS1011, CHEM1021
32	Year 2	MEDI2020	Microbiology/Parasitology	4	3	1	L	BIOL1011, PHYS1011, CHEM1021
33	Year 2	MEDI3050	Nutrition and Food Hygiene	1.5	1	0.5	L	BIOL1011, PHYS1011, CHEM1021
34	Year 2	MEDI1040	Communication in Healthcare	1	0	1	P/F	MEDI1010A/B
35	Year 3	MEDI2030	Mechanisms of Disease and Therapeutic Interventions/Rheumatology/Musculoskeletal	3	2	1	L	MEDI1090, MEDI1050, MEDI1060, MEDI1070, MEDI1080, MEDI2010, MEDI2020, MEDI3050
36	Year 3	MEDI2040	Hematology/Oncology	3	2	1	L	MEDI1090, MEDI1050, MEDI1060, MEDI1070, MEDI1080, MEDI2010, MEDI2020, MEDI3050
37	Year 3	MEDI2050	Neuromuscular/Psychiatry	4	2	2	L	MEDI1090, MEDI1050, MEDI1060, MEDI1070, MEDI1080, MEDI2010, MEDI2020, MEDI3050
38	Year 3	MEDI2060	Endocrine/Reproduction	3	2	1	L	MEDI1090, MEDI1050, MEDI1060, MEDI1070, MEDI1080, MEDI2010, MEDI2020, MEDI3050
39	Year 3	MEDI2070	Gastrointestinal/Nutrition	3	2	1	L	MEDI1090, MEDI1050, MEDI1060, MEDI1070, MEDI1080, MEDI2010, MEDI2020, MEDI3050
40	Year 3	MEDI2080	Cardiology	3	2	1	L	MEDI1090, MEDI1050, MEDI1060, MEDI1070, MEDI1080, MEDI2010, MEDI2020, MEDI3050

41	Year 3	MEDI2090	Dermatology	2	1	1	L	MEDI1090, MEDI1050, MEDI1060, MEDI1070, MEDI1080, MEDI2010, MEDI2020, MEDI3050
42	Year 3	MEDI2100	Pulmonary	4	2	2	L	MEDI1090, MEDI1050, MEDI1060, MEDI1070, MEDI1080, MEDI2010, MEDI2020, MEDI3050
43	Year 3	MEDI3020	Renal/Electrolyte Metabolism/Urology	3	2	1	L	MEDI1090, MEDI1050, MEDI1060, MEDI1070, MEDI1080, MEDI2010, MEDI2020, MEDI3050
44	Year 3	MEDI3030	Infectious Disease/HIV/Parasitology	4	2	2	L	MEDI1090, MEDI1050, MEDI1060, MEDI1070, MEDI1080, MEDI2010, MEDI2020, MEDI3050
45	Year 3	MEDI3070	Fundamental of Population & Health Research 2	3	2	1	L	MEDI1020
46	Year 3	MEDI3080	Fundamental of Population & Health Research 3	2	1	1	L	MEDI1020
47	Year 3	MEDI3010A/B	Introduction to Clinical Medicine 2	2	0	2	P/F	MEDI1040
48	Year 4	MEDI1030	Health Education	2	2	0	P/F	MEDI1010A/B
Total				**77.5**	**44.5**	**33**		
Clinical Courses								
49	Year 4	MEDI4000	Transition to Clinical Training	4	2	2	L	MEDI2030, MEDI2040, MEDI2050, MEDI2060, MEDI2070, MEDI2080, MEDI2090, MEDI2100, MEDI3020, MEDI3030

50	Year 4	MEDI3090	Internal Medicine 1	8	2	6	L	MEDI2030, MEDI2040, MEDI2050, MEDI2060, MEDI2070, MEDI2080, MEDI2090, MEDI2100, MEDI3020, MEDI3030
51	Year 4	MEDI4020	Surgery 1	8	2	6	L	MEDI2030, MEDI2040, MEDI2050, MEDI2060, MEDI2070, MEDI2080, MEDI2090, MEDI2100, MEDI3020, MEDI3030
52	Year 4	MEDI4040	Obstetrics and Gynecology 1	4	1	3	L	MEDI2030, MEDI2040, MEDI2050, MEDI2060, MEDI2070, MEDI2080, MEDI2090, MEDI2100, MEDI3020, MEDI3030
53	Year 4	MEDI4060	Pediatrics 1	4	1	3	L	MEDI2030, MEDI2040, MEDI2050, MEDI2060, MEDI2070, MEDI2080, MEDI2090, MEDI2100, MEDI3020, MEDI3030
54	Year 4	MEDI5070	Neurology	4	1	3	L	MEDI2030, MEDI2040, MEDI2050, MEDI2060, MEDI2070, MEDI2080, MEDI2090, MEDI2100, MEDI3020, MEDI3030
55	Year 4	MEDI5080	Psychiatry	4	1	3	L	MEDI2030, MEDI2040, MEDI2050, MEDI2060, MEDI2070, MEDI2080, MEDI2090, MEDI2100, MEDI3020, MEDI3030
56	Year 4	MEDI4011A/B	Introduction to Clinical Medicine 3	2	0	2	P/F	MEDI3010A/B

57	Year 5	MEDI5011A/B	Introduction to Clinical Medicine 4	2	0	2	P/F	MEDI4011A/B
58	Year 5	MEDI4080	Infectious Disease	4	1	3	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
59	Year 5	MEDI4090	Traditional Medicine	2	1	1	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
60	Year 5	MEDI5010	Tuberculosis	2	1	1	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
61	Year 5	MEDI5050	Dermatology	2	1	1	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
62	Year 5	MEDI5090	Oncology/Hematology	4	1	3	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
63	Year 5	MEDI6010	Community Medicine/Family Practice	6	2	4	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
64	Year 5	MEDI6020	Emergency Medicine	2	1	1	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080

65	Year 6	MEDI4010	Internal Medicine 2	8	2	6	L	MEDI4080, MEDI4090, MEDI5010, MEDI5050, MEDI5090, MEDI6010, MEDI6020, Elective Courses
66	Year 6	MEDI4030	Surgery and Surgical Specialties 2	8	2	6	L	MEDI4080, MEDI4090, MEDI5010, MEDI5050, MEDI5090, MEDI6010, MEDI6020, Elective Courses
67	Year 6	MEDI4050	Obstetrics and Gynecology 2	8	2	6	L	MEDI4080, MEDI4090, MEDI5010, MEDI5050, MEDI5090, MEDI6010, MEDI6020, Elective Courses
68	Year 6	MEDI4070	Pediatrics 2	8	2	6	L	MEDI4080, MEDI4090, MEDI5010, MEDI5050, MEDI5090, MEDI6010, MEDI6020, Elective Courses
Total				**94**	**26**	**68**		
Elective Courses (students select min 11 credits) **								
69	Year 5	MEDI5020	Dental Stomatology Elective	2	1	1	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
70	Year 5	MEDI5030	Ear - Nose - Throat (ENT) Elective	2	1	1	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080

71	Year 5	MEDI5040	Ophthalmology Elective	2	1	1	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
72	Year 5	MEDI5060	Introduction to Rehabilitation Elective	2	1	1	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
73	Year 5	MEDI6070	Forensic Medicine Elective	2	1	1	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
74	Year 5	MEDI6080	Radiology/Nuclear Medicine Elective	2	1	1	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
75	Year 5	MEDI6101	Anesthesia Elective	2	1	1	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
76	Year 5	MEDI4390	Palliative Care Elective	2	1	1	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
77	Year 5	MEDI6340	Sleep Medicine Elective	2	1	1	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080

78	Year 5	MEDI6110	Urology Elective	2	1	1	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
79	Year 5	MEDI6410	Neurosurgery Elective	2	1	1	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
80	Year 5	MEDI6510	Plastic Surgery Elective	2	1	1	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
81	Year 5	MEDI6011	Mental Health Elective (outpatient)	4	1	3	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
82	Year 5	MEDI4061	Pediatrics Elective (outpatient)	4	1	3	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
83	Year 5	MEDI5110	OB-GYN Elective (outpatient)	4	1	3	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
84	Year 5	MEDI6210	Orthopedics & Rehabilitation Elective	4	1	3	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080

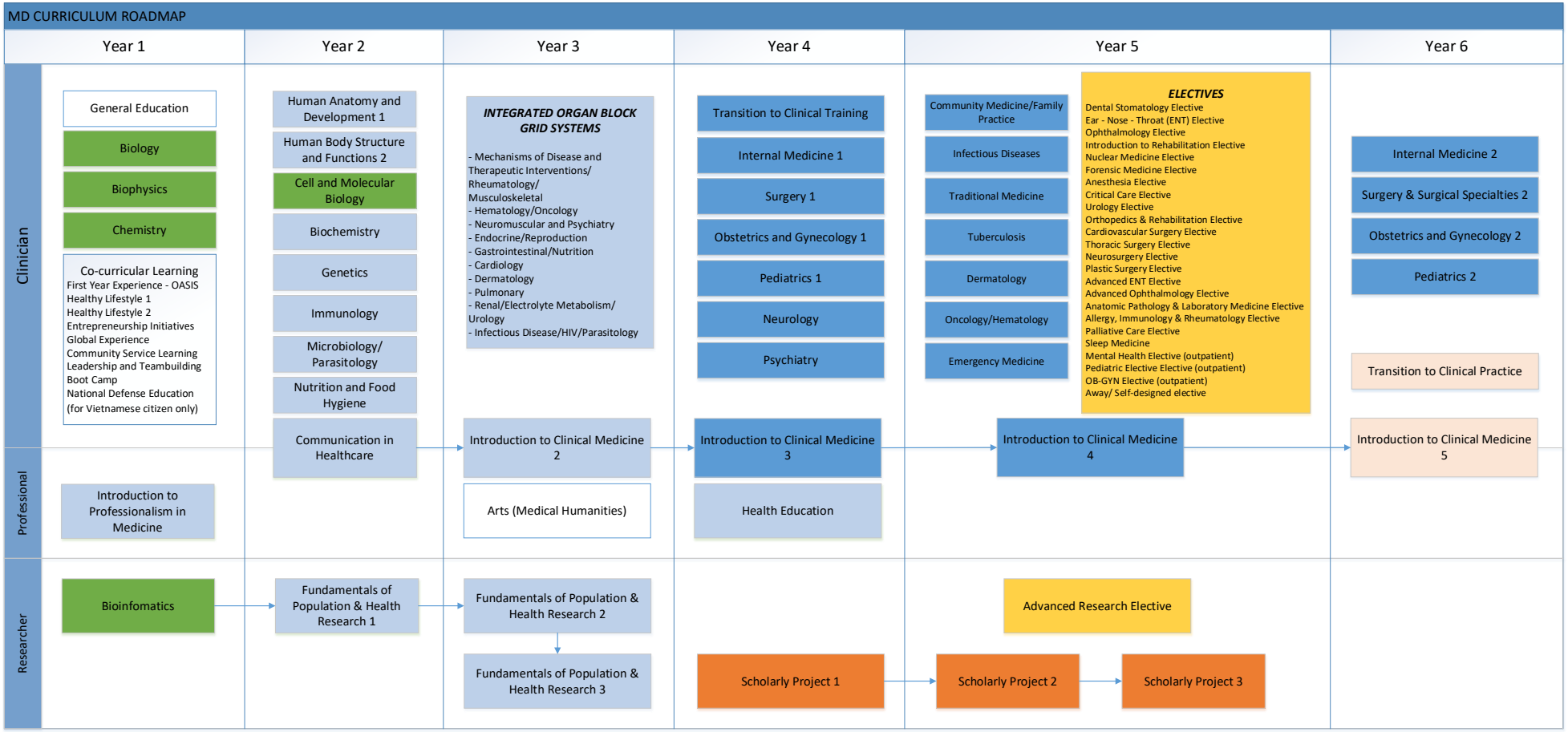
85	Year 5	MEDI6310	Cardiovascular Surgery Elective	4	1	3	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
86	Year 5	MEDI6151	Thoracic Surgery Elective	4	1	3	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
87	Year 5	MEDI6021	Critical Care Elective	2	1	1	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
88	Year 5	MEDI6610	Advanced ENT Elective	4	1	3	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
89	Year 5	MEDI6710	Advanced Ophthalmology Elective	4	1	3	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
90	Year 5	MEDI6810	Anatomic Pathology & Laboratory Medicine Elective	4	1	3	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
91	Year 5	MEDI6910	Allergy, Immunology & Rheumatology Elective	4	1	3	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080

92	Year 5	MEDI7000	Away/Self-designed Elective	2	1	1	L	MEDI4000, MEDI3090, MEDI4020, MEDI4040, MEDI4060, MEDI5070, MEDI5080
93	Year 5	MEDI7032/MEDI7033/MEDI7034	Advanced Research Elective	2 to 4	0	2 to 4	L	MEDI6090
Total				**11**	**3**	**8**		
Scholarly Project								
94	Year 4	MEDI6090	Scholarly Project 1	2	1	1	P/F	MEDI3070
95	Year 5	MEDI7010	Scholarly Project 2	1	0	1	P/F	MEDI6090
96	Year 5	MEDI7020	Scholarly Project 3	1	0	1	P/F	MEDI7010
Total				**4**	**1**	**3**		
Graduation Module								
97	Year 6	MEDI6031	Transition to Clinical Practice	3.5	3.5	0	L	MEDI4080, MEDI4090, MEDI5010, MEDI5050, MEDI5090, MEDI6010, MEDI6020, Elective Courses
98	Year 6	MEDI6011A/B	Introduction to Clinical Medicine 5	2	0	2	L	MEDI5011A/B
Total				**5.5**	**3.5**	**2**		
GRAND TOTAL				**228**	**112**	**116**		

** L: Letter grade, P/F: Pass/Fail*

***Students can select elective courses based on the offerings for the semester or academic year, respectively.*

3.3. MD Curriculum Roadmap



**Note: White box: General Education and Co-curricular, Green box: Basic Sciences, Light Blue box: Pre-clinical Courses, Dark Blue box: Clinical Courses, Yellow box: Elective Courses, Dark Orange box: Scholarly Project, Light Orange box: Graduation Module.*

4. COURSE DESCRIPTIONS

4.1. General Education and Co-Curricular

4.1.1. General Education

Marxism-Leninism Philosophy (Philosophy Science and Society)

3 credits

Philosophy Science and Society is one of four courses in the General Education Program forming the ideology/national education component required for higher education curriculum as directed by the Ministry of Education & Training, Socialist Republic of Vietnam. These four courses are written to achieve the primary objective of helping students understand core values of both country and university through objective and critical academic lenses in a global context. As these courses will be taught in English to students for whom English is mainly a second language at VinUniversity, each course is designed to be delivered in the spirit of content-based language learning approach to help students both develop English language competency (focusing on speaking, listening and reading) and basic understanding of the content. Philosophy, Science & Society (PSS) provides students with a broad survey of key ideas in Philosophy, its relevance to society and the way we think we understand the world, or to put it broadly, "science". We begin the course with an overview of the role of Philosophy and Metaphysics as we embark on this journey of critically re-examining the way we look at our world. In the second part of the course, we take a deep dive into questions of Epistemology, based on which students can orient and develop their creative thinking, philosophy of humanity and action. We follow up with an exploration of trends that came into being with the "social turn" of epistemology found in the critical works of Thomas Kuhn and later in the burgeoning body of works clustered as Sociology of Science. Following this radical re-thinking, we return to the fundamental questions about humanity posed in Social Philosophy and Ethics, to round up our critical inquiry of the complex relationship among philosophy, science and society.

Marxism-Leninism Political Economy (Global Political Economy)

2 credits

Global Political Economy: Vietnam-Region-The World is one of four courses in the General Education Program forming the ideology/national education component required for higher education curriculum as directed by the Ministry of Education & Training, Socialist Republic of Vietnam. These four courses are written to achieve the primary objective of helping students understand core values of both country and university through objective and critical academic lenses in a global context. This course is designed to help students develop a critical lens to understand social reality and social issues, including pressing questions, such as: What is Vietnam's place in the world? What are the opportunities and challenges for Vietnam in the current configuration of the global political economy? To do so, we begin with a brief introduction to the study of political economy, informed by different persuasions in Marx-Leninism, political science, economic, sociology, anthropology and history. Students will gain a nuanced

understanding of this interdisciplinary field through hands-on workshops and exercises on the principles of scientific and logical arguments. The second part of this course will focus on specific issues related to globalization and international integration. In particular, we focus on the role of development, modernization, and regional development in Vietnam's prospects in the world. Our case studies pay special attention to the immediate regions surrounding Vietnam, namely ASEAN, East Asia (in particular, China) and South Asia. In the third and final part of this course, we examine the expressions of global inequality and consider how individuals and communities within Vietnam can move forward in an ever-globalizing world.

Scientific Socialism (Politics and Social Change)

2 credits

Assuming a basic, strong, and even pivotal relationship between society and politics, the course Politics and Social Change will guide participants to a deep understanding of that relationship in Vietnam and the wider Asian region in the 20th and 21st centuries. The course explores key concepts of politics and social change, and in explication of those concepts, examine the dynamics of politics and social change in concrete terms.

What can be learned? – Students at the end of course will become familiar with the concepts of politics and social change of Vietnam. Students will also understand and compare Vietnam with national development efforts elsewhere in Asia. Finally, they will become familiar with major political and international relations developments from the 20th century. The medium of instruction helps students to both develop English language competency (focusing on speaking, and articulation, reading) and discourse skills through continuous practice with classmates and instructor.

Broad outlines – The course begins with a basic appreciation of the concepts of politics and social change, moving into Marxism-Leninism and its application to understanding politics & social change, and extending into how Ho Chi Minh Thought applies Marxism-Leninism and also stands apart as a set of national and contextual ideas and practices. The processes of politics and social change of other countries in the Asia-Pacific are then explored for comparison and contrast.

Medium of learning – The guiding principle for learning at the Vin Uni is active learning. This approach engages students to be active in the learning process with methods that are more than, not without, the traditional base of lectures and tutorials. The instructor or teacher plays the role of facilitator and provides the environment where students responsibly and actively acquire as much as possible, rather than are passively given, the learning points that the course desires.

Participants in this course will learn and share through a mix of lectures, tutorials, non-judgmental journal writing, presentations, and learning to collaborate with others through group projects. The learning environment should be safe, frank, friendly, collaborative, and enlightening.

The weekly lists of readings are divided into two types. Basic readings are recommended, and students should at least complete one for each week. Students who wish to do more can pick up the other basic and optional/additional readings.

History of the Communist Party (Vietnam History and Culture I)

2 credits

The great American humorist and writer Mark Twain once said, "History doesn't repeat itself, but it often rhymes." This course takes as its point of departure the possibility of using those rhymes of the past to better help us navigate our present and future. What lessons can we draw? As future businesspeople, health care professionals, engineers, and computer scientists, these lessons have far more relevance than you may imagine.

Vietnam History and Culture (I) examines Vietnamese history and cultural production from its early origins to 1858 and the French Colonial project. The curriculum is divided into five units. We begin the curriculum by considering the study of both history and culture from theoretical perspectives and consider what these mean in the Vietnamese context. Just what are "History" and "culture"? What does it mean to be Vietnamese? In the second unit, we consider the ancient construction of Vietnamese history and cultural production. The third portion of the course examines the Lý and Trần dynasties as well as the Ming Occupation. Fourth, we explore the movement of Vietnamese people southward and the Tây Sơn Rebellion. And finally, fifth, we assess the unification of Vietnam under the Nguyễn and what is to come.

Too often Vietnamese are portrayed in history as vessels upon which events happen to them. This course treats the Vietnamese as agents of their history, grappling with big questions and great problems. We also explore the Vietnamese people's historical willingness to learn from and integrate foreign ideas and instruments to further develop the Vietnamese culture. To this end, we will wrestle with questions such as: What are the forces that have shaped Vietnamese identity? What drives the worldview(s) of Vietnamese? How has it been transformed over time?

Ho Chi Minh Ideology (Vietnam History and Culture II)

2 credits

Vietnam History and Culture since 1858 is continuation of the first period (from ancient time to 1858) and covers the period from 1858 until today.

The main objective of the course is to analyze the development of Vietnam and its people from 1858 when France attacked and colonized VN through two Indochina wars (1946-1965) and (1954-1975) until today as Vietnam reunified and reformed and integrated into international system.

Due to its strategic geopolitical position, Vietnam has long been a global crossroads. So, this course tries to show as much as possible the parallels, interactions between Vietnam history and events and that happened in the world's stage.

The course also aims to reflect Vietnam history and culture through the central figure of Ho Chi Minh (1890-1969), the most famous Vietnamese during this period. His life and career reflected the development of the very period of Vietnam history. Students are encouraged to do research himself to have broader view, discover new historical details.

Organizational Behavior

2 credits

This course introduces students theoretically and practically to key facets of leadership in organizations. It lays the foundations for students' preparation to being influential leaders who can effectively work in local and global teams. The course covers aspects of self-leadership through developing self-awareness, critical thinking, resilience, and developing a global mindset. It develops interpersonal leadership through addressing perspective taking and feedback management and strengthens team leadership skills through conflict management and ideation management. Students develop skills through theoretical lectures, case study analysis, individual and team assignments, and self-reflection.

Agile Innovation

2 credits

The purpose of this course is to provide students with a basic understanding of the entrepreneurial and innovation mindset and provide students the opportunity to learn about and develop behaviors correlated with successful entrepreneurs and innovators. Skills to be taught include opportunity identification, idea generation, design thinking, building and leading an innovative team, optimizing creativity, seeking customer feedback, and prototyping. This hands-on course will allow students to refine their innovation skills and develop confidence in their creativity skill set. This course involves lectures and in-team innovation experience, generating an innovative product concept. The course is intended for a mix of students from various academic disciplines, such as medicine, nursing, engineering, business, real estate, and hospitality. The course will focus on identifying opportunities in a changing environment. Students will gain a broader perspective of both the challenges and opportunities related to technology and social change. (i.e. unmet customer needs and opportunities for future ventures). As part of the course all students will engage in a 3-day hackathon. For the hackathon event, students will form teams and will identify problems and generate solutions to real-world problems. Students will learn and apply team innovation processes, business model innovation, design thinking, creativity management, product pitches, data analysis, critical thinking, and product innovation. This course will also help students build their professional network.

Academic English 1

3 credits

This course is designed as a continuation of the Pathway English Program Advanced course to further develop students' competency in the English language and introduce and develop students' academic skills and literacies. Academic English 1 is the first of two courses in the General Education Program aimed at developing students' English language and skill competencies for English medium instruction at the university level. Students in this course will continue to develop their academic English language ability in Reading, Listening, Writing, and Speaking. While this course seeks to improve the overall capacity of the students' English language and academic literacy skills, there is an emphasis on the

development of academic writing at the essay level and oral communication skills to prepare students for Academic English 2 and long-term success in university-level coursework.

Academic English 2

3 credits

Academic English 2 reinforces and expands the language and academic skills developed in Academic English 1. Students will continue to expand and refine their range and accuracy of English but will now focus more intensively on the skill of writing. The principal aim of this course is to transition from the written essay to the research paper, augmenting students' academic writing skills to prepare them for the type of writing that is essential to their university studies. After identifying a key academic question, through a scaffolded and multistage approach, students will demonstrate a diversity of writing skills to create a coherent research paper and share their findings with an interdisciplinary audience through formal presentations. Students will further develop their academic inquiry skills, synthesizing and critically evaluating knowledge from various sources, creating new connections and ultimately crafting their own original ideas.

Arts (Medical Humanities)

2 credits

The course focusses on using various forms of creative arts to understand empathy, suffering, disability, ailment, burnout in the practice of medicine. The goal is to provide medical students with a deeper understanding of the patient and physician's perspective through reflections, poetry and paintings. Medical humanities are a broad area of study and practice encompassing all nontechnical or 'human' aspects of medicine. It is a year-long course bringing the arts and science of Medicine together. As students commence their clinical internships, they need to understand the importance of humanities in the management of illness and the patient experience. This course will also cover the VinUni attributes, Empathy and Creativity.

Introduction to Law

2 credits

Introduction to Law is an introduction to concepts, roles, and principles of law as well as major fields of law in society. It provides students with general knowledge of the law that will serve as a helpful foundation for understanding how the law interacts with other disciplines that they study and pursue in the future. The course covers various aspects of legal theory, including notion, nature, sources, the rule of law, major legal and government systems, the legal profession, and comparative legal analysis between different bodies of law, branches of international law as well as various mechanisms of dispute settlement, either at municipal courts or other international forums worldwide. All the topics combine legal understanding and practical issues in the Vietnamese context and a wide diversity of international legal backgrounds to help students gain familiarity with basic concepts of national law and be aware of

international fundamental legal standards. Throughout the course, students develop critical analysis and problem solving, work-in-group and presentation skills, and research literacy in law through theoretical lectures, case law analysis, and individual and team assignments.

4.1.2. Co-Curricular

First Year Experience – OASIS

Compulsory, Non-credit

First-Year Experience – OASIS is a mandatory, non-credit bearing course of the General Education Program. It is a foundational course aimed to equip you, a first-year student with a proper understanding of the general nature, value, and requirement of university education. It is designed to assist you to successfully navigate through your new experience of university learning. It also forms a solid basis of support from which you may further develop their personal and professional excellence in the university. There are 5 components that forms OASIS:
O – Orientation (required hours: 11.5)
A – Advising (required hours: 2)
S – Study skills (required hours: 7 hours for online learning and 7 hours for in-class)
I – Inter-Cultural Competency (required hours: 6)
S – Self- Exploration and Growth (required hours: 6)

Healthy Lifestyle 1, 2

Compulsory, Non-credit

"Healthy Lifestyle" is a mandatory and non-credit bearing course of the General Education Program. Undergraduate students are required to enroll in this course to fulfill part of the graduation requirements and expected to complete it by the end of their first-year study. This course provides the essential knowledge, skills and practicum lessons (exercise/sport classes), whereby students are able to develop a suitable approach in attaining a physically, mentally, socially and spiritually healthy lifestyle. Specifically, this course provides students with the knowledge to make better choices during their daily routines to build a healthy lifestyle. A healthy lifestyles incudes external/internal physical wellbeing and also good mental health. Students receive mentorship that guides and shapes their perspective, showcasing the importance of having a well-balanced life. Fitness and exercise will be discussed as a process and science that allows students to have a greater understanding of what it takes to achieve their physical goals. Nutrition and diet will be taught to dispel the myths about how and what you should eat to achieve desired health results. Rounding out the course will be session about mental health, as a healthy body is nothing without a healthy mind. Having clarity of thought and the ability to effectively process information is a key trademark of a healthy lifestyle. This course emphasizes practical application of the learned concepts in order to integrate subject matter into student daily routines. The majority of coursework will be held in

different environments and venues in order to expose students to the many varieties of fitness tools and resources to maintain a healthy foundation.

Entrepreneurship Initiatives

Compulsory, Non-credit

The entrepreneurship education program is a framework which provides undergraduate and graduate students with the knowledge, skills, and mindset to be successful not just in the context of a new venture but in a broad number of settings. While critical thinking and problem-solving skills are developed; the program also emphasizes tools required to "ask the right questions" and identify new issues at local, regional, and global levels. Through a combination of multi-disciplinary coursework, labs, and co-curricular activities; students are exposed to entrepreneurship, business and economics issues with emphasis on issues affecting innovation ventures. Students learn through the use of case studies, self-assessments, experiential exercises, readings, discussions, papers, and group activities. The core section of the program is accessible to students of all ages and backgrounds. Topics in this section include ideation, product development, team building, and finance for new ventures. Co-curricular activities in this section include making, hackathons, pitching, incubation, mentorships, internships, and company visits. Advanced students will focus on new ventures in specific industries including media, energy, health care, hospitality, and technology. Graduate level students will further focus on managing entrepreneurship in large organizations such as global corporations or cities. In addition to the co-curricular activities in the core section, advanced students also have access to acceleration and commercialization labs.

Global Experience

Compulsory, Non-credit

The module of global experience is a mandatory, non-credit bearing requirement of the General Education Program. It is designed in alignment with the component of global awareness from the VinUni Graduate Attributes, forming a nexus that holistically coheres with the other Attributes. A multi-faceted approach is adopted in enhancing students' global experience through a variety of effective pedagogical channels, such as Semester Abroad/exchange programs, community service learning abroad, cross culture experiences, summer programs and short-term overseas courses. This module is offered through the collaboration of the General Education Program Committee, Office of Students Affairs and the Colleges.

Community Service Learning

Compulsory, Non-credit

This course aims at fostering students' sense of civic and social responsibility as well as their moral personality by engaging them to serve the primary and secondary school students (PSSS) through creatively designing activities, whereby they could apply their knowledge to the monitoring of the PSSS's health conditions and promote the correct and effective ways of enhancing their health awareness. This

course is composed of lectures, seminars, workshops and on-site activities. This is a course where the students' problem-solving minds and community-serving hearts converge.

Leadership and Teambuilding Boot Camp

Compulsory, Non-credit

The intensive 4-week Boot Camp instills foundational leadership values and skills into incoming students; while bringing the class together and creating esprit de corps. Students will learn and apply basic leadership concepts and skills through hands-on learning. Students will have to work individually and in team-based settings to solve complex and dynamic problems taken from the military, government, and business sectors. This includes but is not limited to: conducting long distance land navigation, negotiating obstacle courses, analyzing leadership case studies, and more. From developing self-awareness and thinking critically to innovating ideas and displaying resilience, students will learn fundamentals of Self, Interpersonal, and Team. Leadership was taught through theoretical lectures, case study analysis, individual and team practical exercises, and self-reflection.

National Defense Education (*for Vietnamese citizens only*)

Compulsory, Non-credit

National Defense Education, under MOET framework, plays a crucial role in building national pride, perseverance, and physical endurance among learners to secure the country's civil defense system. By challenging themselves with early morning rituals, followed by rigid mental and physical requirements as well as schedules, students develop their self-discipline, grit & durability. Various extracurricular activities are integrated to the curriculum to foster inclusivity, maturity & responsibility towards student families and their societies.

4.2. Professional Education

4.2.1. Basic Sciences

Biology

2.5 credits

Biology is a compulsory subject for the first-year medical students. It covers basic biological principles as well as introductory concepts of molecular biology and human physiology to prepare students for the career development in medicine.

Biophysics

3.5 credits

Biophysics is a compulsory course for first-year medical students. This course provides fundamental knowledge about Physics and Biophysics which covers five main topics in Physics such as: Mechanics, Thermodynamics, Electromagnetics, Optics and Nuclear Physics. In both theory and practice/ laboratory portion, the course is designed so as the student can understand the involvement of physics in many areas of biology, and medicine in both basic understanding of process/ function as well as in experimental techniques.

Chemistry

2.5 credits

Chemistry is a compulsory course for the first-year medical students. It combines basic chemistry: generalization of atoms, molecules and chemical bonds; inorganic substances and basic dynamic and equilibrium processes; important organic groups related to organisms and life; basic analytical techniques for clinical and biomedical applications.

Bioinformatics

1 credit

Bioinformatics is an interdisciplinary course that combines knowledge of information sciences and medical sciences to optimize the use and application of medical data across the spectrum from individuals to populations. It provides basic knowledge of health information systems, data gathering, and management, applied to scientific research, medical analysis and statistics to support treatment plan establishment and evidence-based decision-making. Students will be introduced basic skills to apply medical software/systems on the activities related to healthcare management and operations.

Cell and Molecular Biology

1.5 credits

Cell and Molecular Biology is designed to provide a basic introduction to cell structure and function. This course will cover the biological activities of cells and tissues at the molecular level.

4.2.2. Pre-clinical Courses

Introduction to Professionalism in Medicine

3.5 credit

This course in year one sets the foundations of professionalism. Students, being the active learners, will identify the core components of what it means to be a professional as medical student and a doctor in later years. These components once identified will determine the content to be learned across the six years.

Human Anatomy & Development 1

7 credits

These are sequential courses that integrate gross and embryologic anatomy of the human body, principles of physiology with the structure and function of cells and tissues. Imaging anatomy in radiology is also included. The courses are organized into units based upon the body systems and emphasize the clinical anatomy essential to the practice of medicine, physiologic processes in the human body. The courses include lectures, laboratories, and case studies.

Human Body Structure and Functions 2

7 credits

These are sequential courses that integrate gross and embryologic anatomy of the human body, principles of physiology with the structure and function of cells and tissues. Imaging anatomy in radiology is also included. The courses are organized into units based upon the body systems and emphasize the clinical anatomy essential to the practice of medicine, physiologic processes in the human body. The courses include lectures, laboratories, and case studies.

Biochemistry

4.5 credits

Biochemistry is designed to provide the medical student with an overview of the basic functional principles of biochemistry. This course covers the biochemical pathways, cellular signaling, and communications systems that regulate metabolic processes. It builds on these fundamental principles by providing an integrated approach that correlates with case presentations to explore how defects in the metabolic pathways alter the physiology of the cell and how disease ensues.

Genetics

3 credits

Genetics is designed to introduce the medical student to the fundamental concepts and techniques of modern human genetics and genomics. This course provides a basic introduction to the structure and

function of genes and the general organization of the Human Genome. The course will also cover key concepts of gene regulation and epigenetics in normal cells. This is followed by content about chromosomes and chromosomal abnormalities as they relate to disease. The second half of the course is used to highlight the clinical significance and translation of key genetic concepts.

Immunology

3 credits

Immunology is designed to teach the medical student about the cellular and molecular basis of immune-mediated host defenses to invading microbes. This course provides a basic introduction to the general organization and functional principles of host defense elements. It builds on these fundamental principles covered by providing an integrated approach that correlates with case presentations to highlight the clinical significance and translation of key immunological concepts.

Microbiology/Parasitology

4 credits

Microbiology/Parasitology is designed to introduce the medical student to the fundamental principles of microbiology and parasitology. This course provides an overview of microbiology and covers basic bacteriology, virology, mycology and parasitology. Throughout the second semester, an integrated approach with case discussions highlights the role of host defenses and correlates organisms with disease presentations.

Nutrition and Food Hygiene

1.5 credits

Nutrition and Food Hygiene provides fundamental knowledge and practical skills to engage healthy nutrition planning and food hygiene management to promote nutrition and health of individuals and communities.

Mechanisms of Disease and Therapeutic Interventions/Rheumatology/Musculoskeletal

3 credits

The Mechanisms of Disease and Therapeutic Interventions/Rheumatology/Musculoskeletal block provides an overview of essential concepts incorporated into each organ system block. This course has three major components: overview of cellular and tissue responses to injury; general pathology and pharmacological principles; and diagnostic, clinical, and therapeutic aspects of musculoskeletal and rheumatologic diseases/disorders.

Hematology/Oncology

3 credits

The Hematology/Oncology block focuses on various elements of the blood, bone marrow, and lymphatic system as well as general concepts in oncology. This course has two components: an overview of cancer biology and management, followed by coverage of the cellular elements of blood and the diseases/disorders affecting each of those elements.

Neuromuscular/Psychiatry

4 credits

The Neuromuscular/Psychiatry block focuses on the nervous system as well as mental health and behavioral health diseases/disorders. Following a review of the normal structure and function of the nervous system, this course provides an integrated approach that correlates basic pathogenetic and pathophysiologic principles with the diagnostic, clinical, and therapeutic aspects of diseases/disorders affecting the neuromuscular system.

Endocrine/Reproduction

3 credits

The Endocrine/Reproduction block focuses on various hormones that affect metabolism, growth and development, sexual function, and reproduction as well as the reproductive system. Following a review of the normal structure and function of the endocrine and reproductive systems, this course provides an integrated approach that correlates basic pathogenetic and pathophysiologic principles with the diagnostic, clinical, and therapeutic aspects of diseases/disorders affecting the endocrine and reproductive systems.

Gastrointestinal/Nutrition

3 credits

The Gastrointestinal/Nutrition block focuses on the digestive system and the absorption of various nutrients. Following a review of the normal structure and function of the gastrointestinal system, this course provides an integrated approach that correlates basic pathogenetic and pathophysiologic principles with the diagnostic, clinical, and therapeutic aspects of diseases/disorders affecting the gastrointestinal system.

Cardiology

3 credits

The Cardiology block focuses on the heart and circulatory system. Following a review of the normal structure and function of the cardiovascular system, this course provides an integrated approach that

correlates basic pathogenetic and pathophysiologic principles with the diagnostic, clinical, and therapeutic aspects of diseases/disorders affecting the cardiovascular system

Dermatology

2 credits

The Dermatology block focuses on the skin, hair, and nails. Following a review of the normal structure and function of the skin, this course provides an integrated approach that correlates basic pathogenetic and pathophysiologic principles with the diagnostic, clinical, and therapeutic aspects of diseases/disorders affecting the skin and its appendages.

Pulmonary

4 credits

The Pulmonary block is an integrated course that focuses on the respiratory tract. Following a review of the normal structure and function of the respiratory system, this course provides an integrated approach that correlates basic pathogenetic and pathophysiologic principles with the diagnostic, clinical, and therapeutic aspects of diseases/disorders affecting the respiratory system.

Renal/Electrolyte Metabolism/Urology

3 credits

The Renal/Electrolyte Metabolism/Urology block focuses on the kidneys and genitourinary system. This course has two major components: a review of the normal structure and function of the kidney along with an overview of fluid, electrolyte, and acid-base physiology and diseases/ disorders; and an integrated approach correlating basic pathogenetic and pathophysiologic principles with diagnostic, clinical, and therapeutic aspects of diseases/ disorders affecting the urinary tract.

Infectious Disease/HIV/Parasitology

4 credits

The Infectious Diseases/HIV/Parasitology block focuses on various types of infections. Following a review of the different classes of organisms causing disease/disorder, this course provides an integrated approach that correlates basic pathogenetic and pathophysiologic principles with the diagnostic, clinical, and therapeutic aspects of infectious and parasitic diseases.

Fundamentals of Population & Health Research 1

(Introduction to Epidemiology and Public Health)

2 credits

This course introduces the basic concepts and inferential methods of biostatistics and epidemiology. It is designed to enable the medical student to gain foundational knowledge within these fields and apply basic principles as relevant to medicine. This course will also cover topics in demography, research methods and ethics as well as critical reading, interpretation, and analysis of medical literature.

Fundamentals of Population & Health Research 2

(Health Economics, Health Systems, Policy and Law)

3 credits

Health Economics - Health System - Health Policy and Law course includes concepts and applications of principles in health system operation. It introduces the organizational models and facilitators of healthcare systems, specifically the functions and responsibilities of institutions and networks in the Vietnamese health promotion and services delivery system.

This course also provides basic concepts of health economics and development, the use of economic evidence in health planning, priority setting, medical decision making, and sustaining the health financing system. This will also enable students to deepen understandings of policy development and legal infrastructures in the Vietnamese health sector, and its implications in maximizing the system efficiency and quality as well as population health outcomes.

Fundamentals of Population & Health Research 3

(Healthcare Quality Improvement, Patient Safety, and Evidence Based Medicine)

2 credits

This course is a unique course of VinUni which introduces key concepts and principles of health quality improvement and patient safety, methods for evaluating and monitoring quality and outcomes of health services and the applications of guidelines towards international goals in patient safety. This course will prepare students with understanding of hospital environment and regulations to provide high quality and effective medical services that helps them maximize clinical learning outcomes in senior years.

Communication in Healthcare

(Introduction to Clinical Medicine 1)

1 credit

The course focuses on the development of communication skills and strategies in a variety of medical contexts, increasing the learner's confidence when communicating with patients, caregivers and their families as well as with peers and members with health professional teams.

Introduction to Clinical Medicine 2

2 credits

Introduction to Clinical Medicine 2 is a practical course focusing on developing both clinical and interpersonal skills. Throughout this course, students will be able to practice the principles of patient history-taking and physical examinations techniques in a more comprehensive manner. Additionally, students will practice the art of empathetic, culturally sensitive patient communication. This course is a gateway to enable students to become a well-rounded, compassionate healthcare provider.

This course covers 4 important clinical skills: (1) history taking skills, (2) physical examination skills, (3) communication and interpersonal skills, (4) clinical reasoning skills.

This is a practical course in the six-year MD program. It is integral for the students to have hands-on experience of discovering normal and abnormal signs of the patients.

Health Education

2 credits

This course covers essential concepts and theoretical models regarding health education to promote healthy behaviors and services in various healthcare settings. By engaging in various course activities, learners will have opportunities to understand how healthcare providers develop health education plans and communicate effectively with patients on a range of health topics. Additionally, a service-based learning project, aligned with Ministry of Health requirements, provides students with experience in applying these concepts in practical situations.

4.2.3. Clinical Courses

Transition to Clinical Training

4 credits

Transition to Clinical Training (TCT) is a 4-week course that bridges the gap between preclinical and clinical years in undergraduate medical education. It prepares students for clerkship rotations by providing

essential skills, core knowledge, and understanding. The course includes Introduction to Clinical Medicine (ICM), focusing on clinical skills; Hospital Preparation (HP), covering the clinical practice environment; and Differential Diagnosis (DDX), emphasizing symptom-based diagnosis. TCT ensures students are equipped for clinical training and delivering quality patient care for the upcoming clerkship period.

Internal Medicine 1

8 credits

Internal Medicine 1 is a clinical rotation that focuses on health and illness in adult patients. Rotation objectives include: observational and supervised direct care of internal medicine patients in hospital and outpatient settings, with emphasis on acquisition of information from history and physical examination, case presentation, integration and interpretation of clinical information, clinical reasoning and diagnostic and therapeutic options.

Internal Medicine 2

8 credits

Internal Medicine 2 is an advanced clinical rotation that builds upon the internal medicine clinical experience during fourth year. Rotation objectives include: clinical care of internal medicine patients in both inpatient and outpatient settings; provision of graduated levels of independence and responsibility compared to the fourth-year internal medicine rotation; development of skills in internal medicine procedures; and application of knowledge and skills learned from prior rotations, research and medical practice principles and interprofessional education training to promote competent practice in internal medicine.

Surgery 1

8 credits

Surgery 1 is a clinical rotation that focuses on the use of procedural techniques to treat illness and improve health. Rotation objectives include: observational and supervised direct care of surgical patients in hospital and outpatient settings, with emphasis on diagnostic evaluation of potential surgical problems, preoperative evaluation, participation in surgical procedures and postoperative care.

Surgery and Surgical Specialties 2

8 credits

Surgery and Surgical Specialties 2 is an advanced clinical rotation that builds upon the surgery clinical experiences during fourth year. Rotation objectives include: clinical care of patients in both inpatient and outpatient settings, provision of graduated levels of independence and responsibility compared to the fourth-year surgery rotation; development of skills in basic surgical procedures; and application of

knowledge and skills learned from prior rotations, research and medical practice principles, and interprofessional education training to promote competent practice in surgery and surgical specialties.

Obstetrics and Gynecology 1

4 credits

Obstetrics and Gynecology 1 is a clinical rotation dealing with health and illness in women, focusing on the reproductive system. Rotation objectives include observational and supervised direct care of women throughout pregnancy, including labor and delivery; skill development in pelvic and breast examinations; and observational and supervised direct care of women with disorders of the breast and the female reproductive system.

Obstetrics and Gynecology 2

8 credits

Obstetrics and Gynecology 2 is an advanced clinical rotation that builds upon the obstetrics and gynecology clinical experiences during fourth year. Rotation objectives include: clinical care of women in both inpatient and outpatient settings, provision of graduated levels of independence and responsibility compared to the fourth-year obstetrics and gynecology rotation; active participation in labor and delivery; development of skills in basic obstetrics and gynecology procedures; and application of knowledge and skills learned from prior rotations, research and medical practice principles, and interprofessional education training to promote competent practice.

Pediatrics 1

4 credits

Pediatrics 1 is a clinical rotation that focuses on health and illness in infants, children, and adolescents. Rotation objectives include observational and supervised direct care of pediatric patients in hospital and outpatient settings, with emphasis on normal development, prevention and health maintenance, acquisition of information from history and physical examination, case presentation, integration and interpretation of clinical information and diagnostic and therapeutic decision-making.

Pediatrics 2

8 credits

Pediatrics 2 is an advanced clinical rotation that builds upon the pediatrics clinical experience during fourth year. Rotation objectives include clinical care of children in both inpatient and outpatient settings; provision of graduated levels of independence and responsibility compared to the fourth-year pediatrics rotation; development of skills in pediatric procedures; and application of knowledge and skills learned from prior rotations, research and medical practice principles and interprofessional education training to promote competent practice in pediatrics.

Neurology

4 credits

Neurology is a clinical rotation that focuses on diagnosis and management of diseases of the nervous system. Rotation objectives include observational and supervised direct care of patients with disorders of the nervous system, and skill development in the neurologic examination and the sampling of cerebrospinal fluid by lumbar puncture.

Psychiatry

4 credits

Psychiatry is a clinical rotation that focuses on mental and behavioral health. Rotation objectives include observational and supervised direct care of patients with behavioral and mental health disorders, with a focus on diagnostic evaluation and management, including pharmacologic management.

Introduction to Clinical Medicine 3

2 credits

The Introduction to Clinical Medicine 3 (ICM3) module is a continuum of the ICM 1 and 2 modules. In this module, students will attend the simulation center on Fridays during the Academic Day to learn common medical procedural skills that Year 4 clerkship medical students should know. The simulation center provides a controlled and immersive environment to learn and practice these crucial procedural skills. The teaching and learning approach combines hands-on experience, technology, and feedback to prepare you better, the future medical professionals for the complexities of healthcare settings.

Introduction to Clinical Medicine 4

2 credits

This course has two components: (1) advanced communication skills and (2) advanced clinical procedures. This is a practical course in the six-year MD program. It is integral for the students to have hands-on experience of familiarizing with the advanced clinical skills in different clinical encounters and explore the broader implications of communication in healthcare. This course will help to develop students' ability to integrate cultural and scientific knowledge from their local context and apply the knowledge to the global community, fostering a holistic approach to patient care. Students will be taught the diverse meanings of health, illness, and medical practices across different cultures and countries, enhancing the cultural competence of healthcare professionals. This course is integral in preparing students for the complexities of clinical practice to ensure that they are adept in effective communication and culturally competent care, with a strong focus on bridging cultural gaps through empathy and understanding.

Infectious Disease

4 credits

This clinical clerkship builds on preclinical Microbiology knowledge, focusing on the clinical aspects of infectious diseases. Students will practice patient assessment, interpret culture results, and apply antibacterial, antiviral, and antifungal therapies through case-based discussions. The "Accessible Antibiotics" lecture series on Canvas is a required prerequisite and provides the foundation for didactic sessions. The rotation aims to strengthen diagnostic reasoning and treatment decision-making in infectious disease care.

Traditional Medicine

2 credits

Traditional Medicine is a core Year 5 clinical rotation that introduces students to the principles and applications of traditional healing practices. The course covers basic diagnostic methods and treatments, including herbal, pharmacological, and non-pharmacological approaches such as acupuncture, cupping, and moxibustion. Students will develop differential diagnosis skills and explore the integration of traditional and Western medicine through clinical practice, didactic sessions, and field visits, with a focus on the role of traditional medicine in Vietnam's healthcare system.

Tuberculosis

2 credits

This course provides an overview of the diagnosis, treatment, and prevention of tuberculosis. Students will learn to take patient histories, perform physical exams, understand TB pathophysiology, and recognize both pulmonary and extrapulmonary TB presentations. The course includes two main components: didactic sessions and clinical practice.

Dermatology

2 credits

This course introduces students to the diagnosis and management of common skin, hair, nail, and gland disorders. It covers neoplastic, inflammatory, autoimmune, and systemic-related dermatologic conditions through clinical exposure and guided learning.

Oncology/Hematology

4 credits

The course provides students with clinical exposure to the diagnosis and management of cancer and blood disorders. Students will engage in both observation and supervised patient care, focusing on diagnostic workup, disease staging, and the use of genetic markers in treatment planning. The rotation also introduces

therapeutic approaches including surgery, chemotherapy, radiation, immunotherapy, and targeted therapies.

Community Medicine/Family Practice

6 credits

This rotation emphasizes primary care in community settings. Students will participate in both observation and supervised patient care, focusing on common outpatient conditions, health promotion, disease prevention, and continuity of care across all age groups.

Emergency Medicine

2 credits

This course provides an overview of the clinical presentation, initial diagnosis, and early management of common life-threatening emergencies encountered in adult patients in the Emergency Department and Intensive Care Unit.

4.2.4. Elective Courses

Dental Stomatology Elective

2 credits

This course equips primary care providers with essential knowledge on the connection between oral health and overall health. Through brief online modules, it explores how medical conditions and medications impact oral health and highlights the importance of integrating oral health assessments and referrals into routine care. Learners will gain skills in identifying common oral conditions such as dental caries, periodontal disease, and oral cancers, with a focus on improving interdisciplinary care and reducing healthcare disparities.

Ear - Nose - Throat (ENT) Elective

2 credits

This elective course in Ear, Nose, and Throat (ENT) is designed for fifth-year MD students to deepen their knowledge and skills in diagnosing, treating, and managing disorders of the ear, nose, throat, head, and neck. Building upon the foundational concepts learned in earlier years of medical school, this course focuses on enhancing clinical expertise in the ENT specialty. Students will gain hands-on experience in advanced diagnostic and treatment techniques, preparing them for future clinical practice.

Ophthalmology Elective

2 credits

This course provides a thorough introduction to essential ophthalmic topics, covering eye anatomy, refractive errors, cataracts, and ocular emergencies. Participants will learn how to perform detailed ocular histories and examinations, identify signs of systemic diseases, and understand the importance of timely referrals. By the end of the course, attendees will be proficient in diagnosing and managing both common and critical eye conditions, improving their clinical skills and patient care.

Introduction to Rehabilitation Elective

2 credits

This course focuses on providing comprehensive care for individuals with disabilities, improving their independence and quality of life. Students will gain hands-on experience in managing conditions like spinal cord injuries, brain injuries, strokes, and orthopedic issues through direct care and supervised observation. The curriculum covers neurological and musculoskeletal rehabilitation, including assessment, diagnosis, management, and the psychological and social aspects of patient care. By the end of the clerkship, students will be equipped to contribute effectively to improving patients' functional independence.

Forensic Medicine Elective

2 credits

The Forensic Medicine elective aims to introduce students to the fundamental concepts of forensic medicine and the connection between medicine and law. During this two-week course in Year 5, students will learn the basics of forensic examinations, the legal aspects of medical practice, and how to recognize physiological changes and injuries on the body before and after death. The course includes interactive presentations, reading scientific materials, group discussions, and analysis of real-life forensic cases. It is designed for students interested in understanding the practice of forensic medicine and its relationship with law.

Radiology/Nuclear Medicine Elective

2 credits

This elective course, designed for mid-clerkship students, offers advanced opportunities to expand their knowledge and skills in radiology. Building on foundational principles, students will deepen their understanding and explore advanced radiology concepts, preparing for future practice and postgraduate training in the field. Students will be paired with a resident or faculty member during weekly rotations and participate in read-outs with attending radiologists. The course covers radiologic anatomy, appropriate study selection for disease diagnosis, and the basics of radiologic reporting and dictation. Students can

also tailor rotations to specific radiology interests, such as ultrasound, mammography, interventional radiology, and nuclear medicine.

Anesthesia Elective

2 credits

This elective course aims to introduce students to essential aspects of anesthesiology that every physician should understand. Through an intensive one-on-one experience with dedicated instructors, students will learn about preoperative evaluation, risk stratification, and surgical patient preparation. The course covers basic respiratory and cardiac physiology, the effects of anesthetic agents on the cardiovascular system, standard physiological monitoring, postoperative pain management, and basic ventilator management. This elective is open to Year 5 students and those participating in the 1-2 week(s) perioperative medicine selective during Year 6 Sub-internship in Surgery.

Palliative Care Elective

2 credits

This elective course offers fifth-year MD students an introduction to Palliative Care Medicine. The course covers the principles and practices of caring for patients with life-limiting illnesses, focusing on managing complex symptoms like pain, providing psychosocial support, and addressing ethical issues in end-of-life care.

Sleep Medicine Elective

2 credits

This course provides students with an introduction to the principles and practices of sleep medicine. This course covers the basics of diagnosing and treating sleep disorders, including the use of continuous positive airway pressure (CPAP) and both nonpharmacological and pharmacological treatment options. The curriculum emphasizes developing differential diagnosis skills through understanding physiology, pathophysiology, clinical symptoms, history taking, and physical examination within the context of sleep medicine.

Urology Elective

2 credits

This elective course provides a comprehensive understanding of urological disorders, diagnostics, treatment options, and surgical techniques. This course equips students with the knowledge and skills to diagnose and manage conditions affecting the urinary tract and male reproductive system in both male and female patients across various age groups. Through direct care and supervised observation, students will learn urological techniques and interdisciplinary collaboration. The curriculum focuses on clinical symptoms, diagnosis, and management of urological cases, helping students develop skills in assessment,

surgery planning, and personalized patient care. By the end of the clerkship, students will have a solid foundation in urology and be prepared to work collaboratively in multidisciplinary care teams.

Neurosurgery Elective

2 credits

This elective course provides MD students with a comprehensive understanding of the principles and practical skills needed for diagnosing, treating, and managing neurosurgical conditions. Focusing on disorders of the brain, spinal cord, and peripheral nerves, the course combines didactic lectures, interactive discussions, case-based learning, laboratory sessions, clinical rotations, and observation of neurosurgical procedures. Students will also engage in hands-on activities, simulation exercises, and research projects related to neurosurgery.

Plastic Surgery Elective

2 credits

This elective course offers fifth-year MD students an introduction to Plastic Surgery, focusing on both reconstructive and cosmetic procedures. The course aims to enhance students' knowledge and clinical skills in assessing, diagnosing, and managing conditions that require plastic surgical intervention. Through clinical rotations, students will gain hands-on experience and learn the principles and techniques used in plastic surgery.

Advanced Research Elective

2 to 4 credits

This research elective involves a medical student collaborating with a faculty member on a research project. To receive credit, students must get approval for the project at least two weeks before the course start date. The proposed research electives must be reviewed and approved by the faculty course instructor and the appropriate education leader (e.g., Program Director, Chair of Academic Year, or Vice Dean for Medical Education) before being added to the student's schedule. Students are required to submit their research request via Canvas (to be updated).

Mental Health Elective (outpatient)

4 credits

This elective course offers fifth-year MD students an in-depth exploration of Mental Health, focusing on the diagnosis, treatment, and management of psychiatric disorders in outpatient settings for adults, adolescents, and children. The course aims to enhance students' clinical skills and knowledge in mental health care, offering hands-on experience through clinical rotations, case studies, and interdisciplinary collaboration.

Pediatrics Elective (outpatient)

4 credits

This elective course offers students a broad-based experience in caring for pediatric patients in a clinic setting, with a focus on preventive medicine, postnatal infant care, and nutrition. Under the supervision of a pediatric preceptor, students will develop clinical, procedural, and communication skills. Core topics in outpatient pediatrics will be explored through patient-centered learning and real-world clinical encounters.

OB-GYN Elective (outpatient)

4 credits

This elective course introduces fifth-year MD students to key aspects of obstetrics and gynecology that are essential for all physicians. Through hands-on experiences with dedicated educators, students will gain knowledge and skills in performing OB-GYN examinations, understanding gynecological and obstetric ultrasound, and learning the basics of prenatal screening and diagnosis. This course also covers the principles of infertility diagnosis and treatment, including training in assisted reproductive procedures.

Orthopedics & Rehabilitation Elective

4 credits

This elective course offers fifth-year MD students a comprehensive introduction to Orthopedics, focusing on the diagnosis, management, and treatment of musculoskeletal conditions. Students will gain hands-on clinical experience and develop skills in both surgical and non-surgical (including rehabilitation) approaches to orthopedic care.

Cardiovascular Surgery Elective

4 credits

This elective course provides fifth-year MD students with an in-depth introduction to Cardiac and Vascular Surgery. It focuses on the diagnosis, treatment, and management of cardiovascular diseases, combining clinical rotations with exposure to specialized surgical procedures and aims to strengthen students' clinical knowledge and hands-on skills in the field of cardiovascular care.

Thoracic Surgery Elective

4 credits

This elective course offers fifth-year MD students comprehensive exposure to Thoracic Surgery, emphasizing preoperative and postoperative care, as well as active participation in surgical procedures. Students will manage cases involving lung, mediastinal, and thyroid conditions, many of which present complex diagnostic and therapeutic challenges. The course includes faculty-led conferences and may offer

opportunities for students to present clinical cases, strengthening both their clinical understanding and communication skills in thoracic surgery.

Critical Care Elective

2 credits

This elective course offers fifth-year MD students essential exposure to Critical Care Medicine. Through hands-on experience in the ICU and related settings, students will develop skills in assessing, diagnosing, and managing life-threatening conditions, gaining a deeper understanding of the clinical care of critically ill patients.

Advanced ENT Elective

4 credits

This elective course provides fifth-year MD students with in-depth exposure to Otolaryngology, ideal for those pursuing the specialty or seeking to strengthen their clinical skills in ENT care. Students will engage in diagnosing and managing conditions in otology, rhinology, laryngology, and head and neck oncology through active participation in both outpatient and inpatient settings, with opportunities for procedural and operative experience.

Advanced Ophthalmology Elective

4 credits

This elective course offers fifth-year MD students the opportunity to deepen their clinical skills in Ophthalmology, whether pursuing the specialty or exploring eye care further. The course includes exposure to subspecialties such as cornea, glaucoma, and retinal diseases. Students will actively participate in both outpatient and inpatient care, with hands-on opportunities in procedures and surgeries.

Anatomic Pathology & Laboratory Medicine Elective

4 credits

This elective course offers mid-clerkship students a chance to deepen their understanding of pathology by building on foundational knowledge and exploring advanced concepts. It aims to refine clinical reasoning skills and support students interested in pursuing further training or a career in pathology.

Allergy, Immunology & Rheumatology Elective

4 credits

This elective course offers students hands-on experience in diagnosing and managing common conditions in both adults and children. Students will work closely with faculty in the ambulatory clinic, participate in musculoskeletal ultrasound, attend division conferences, and engage in self-study using Osmosis. This

course enhances clinical skills, critical thinking, and provides opportunities for research in immunology, preparing students for further specialization and career development in these fields.

Away Elective/Self-designed Elective

2 credits

This elective course allows fifth-year MD students to create a personalized learning experience based on their interests and career goals. Students can explore a specific medical specialty or gain unique clinical experiences beyond the standard curriculum, with the option to complete the elective at a global or local institution outside of VinUni and its affiliated hospitals.

4.2.5. Scholarly Project

Scholarly Project

4 credits

The "Scholarly Project 1, 2, and 3" courses offer students the chance to work on a research project, which may involve basic, clinical, or library research. The project culminates in a report that includes the background, research questions, methodology, results, and a discussion/conclusion.

4.2.6. Graduation Module

Transition to Clinical Practice

3.5 credits

This course is designed to equip medical students with essential knowledge and skills to navigate the crucial transition of medical students into competent and resilient junior doctors. Through a series of engaging workshops and discussions, students will explore key aspects of professional development, patient care, teamwork, and personal well-being in the medical field. The course integrates theoretical learning with practical insights shared by experienced residents and alumni, fostering a holistic understanding of the challenges and rewards of becoming a physician. A significant portion of the course is dedicated to reinforcing learning through structured coaching and self-revision activities focused on the systematization of biomedical, clinical, and social-behavioral sciences into clinical reasoning and application of evidence-based methodologies in diagnosis, management, and preventive care.

Introduction to Clinical Medicine 5

2 credits

This is part of the clinical graduation requirement in the MD program. The course focuses on preparing students for real-world clinical environments by advancing their knowledge, skills, and professional behavior. Through hands-on experiences and simulations, students will systemize medical knowledge to diagnose and manage common acute conditions, perform essential procedures accurately and in a timely manner during emergency situations, and apply patient safety principles and evidence-based practices in clinical decision-making. The course also emphasizes professionalism, ethical conduct, empathetic communication, interprofessional collaboration, and advocacy to improve patient care and healthcare system performance.