

## About the Course: MBBS

Bachelor of Medicine and Bachelor of Surgery” (MBBS) is a curriculum offered in this institute. This is under the purview of National Medical Commission (previously Medical Council of India) and affiliated to Bihar University of Health Sciences, Patna. The course is divided into pre, para and clinical subjects covered in 4.5 years duration.

**Duration:** 4½ Years & 1 year Internship

The institution offers courses in medical specialties at the undergraduate level. The course is permitted by the National Medical Commission (previously Medical Council of India) and affiliated to Bihar University of Health Sciences, Patna.

**Annual Intake is 150 students for MBBS Course.**

### Curriculum for MBBS

<b>First MBBS Pre-Clinical Phase (Phase I) – First Professional Phase</b>	Human Anatomy, Physiology, Biochemistry, Introduction to Community Medicine, Humanities, Professional development including Attitude, Ethics & Communication (AETCOM) module and early clinical exposure, ensuring both horizontal and vertical integration.	2 (two) Semesters  [13 months]
<b>Second MBBS – Para-clinical Phase (Phase II) – Second Professional]</b>	Pathology, Pharmacology, Microbiology, Community Medicine, Forensic Medicine and Toxicology, Professional development including Attitude, Ethics & Communication (AETCOM) module and introduction to clinical subjects.	2 (two) Semesters  [12 months]
<b>Final MBBS (Part I &amp; II) – Clinical Phase [(Phase III) – Third Professional]</b>	(a) Part I (13 months) – The clinical subjects include General Medicine, General Surgery, Obstetrics & Gynaecology, Pediatrics, Orthopaedics, Dermatology, Otorhinolaryngology, Ophthalmology, Community Medicine, Forensic Medicine and Toxicology, Psychiatry, Respiratory Medicine, Radiodiagnosis & Radiotherapy and Anaesthesiology & Professional development including AETCOM module.	5(Five) Semesters  [28 months in total]

	<p><b>(b) Electives (2 months)</b> - To provide learners with opportunity for diverse learning experiences, to do research/community projects that will stimulate enquiry, self directed experimental learning and lateral thinking.</p> <p><b>(c) Part II (13 months)</b> - Clinical subjects include: i. Medicine and allied specialties (General Medicine, Psychiatry, Dermatology Venereology and Leprosy (DVL), Respiratory Medicine including Tuberculosis) ii. Surgery and allied specialties (General Surgery, Orthopedics [including trauma]), Dentistry, Physical Medicine and rehabilitation, Anaesthesiology and Radiodiagnosis) iii. Obstetrics and Gynecology (including Family Welfare) iv. Pediatrics v. AETCOM module</p>	
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## **COMPETENCY BASED CURRICULUM [CBME] OF THE INDIAN MEDICAL GRADUATE PROGRAMME [IMG]**

### **PHASE WISE TRAINING AND TIME DISTRIBUTION FOR PROFESSIONAL DEVELOPMENT**

The Competency based Undergraduate Curriculum and Attitude, Ethics and Communication (AETCOM) course, as published by the Medical Council of India and also made available on the Council's website, shall be the curriculum for the batches admitted in MBBS from the academic year 2019-20 onwards.

#### **Training period and time distribution:**

- Every learner shall undergo a period of certified study extending over **4 ½ academic years**, divided into **nine semesters** from the date of commencement of course to the date of completion of examination which shall be followed by **one year of compulsory rotating internship**.
- Each academic year will have at **least 240 teaching days** with a minimum of eight hours of working on each day including one hour as lunch break.

- Teaching and learning shall be aligned and integrated across specialties both vertically and horizontally for better learner comprehension. Learner centered learning methods should include problem oriented learning, case studies, community oriented learning, self- directed and experiential learning.

**The period of 4 ½ years is divided as follows:**

**Pre-Clinical Phase [(Phase I) - First Professional phase of 13 months]** preceded by **Foundation Course of one month**: will consist of preclinical subjects – Human Anatomy, Physiology, Biochemistry, Introduction to Community Medicine, Humanities, Professional development including Attitude, Ethics & Communication (AETCOM) module and early clinical exposure, ensuring both horizontal and vertical integration.

**Para-clinical phase [(Phase II) - Second Professional (12 months)]**: will consist of Para-clinical subjects namely Pathology, Pharmacology, Microbiology, Community Medicine, Forensic Medicine and Toxicology, Professional development including Attitude, Ethics & Communication (AETCOM) module and introduction to clinical subjects ensuring both horizontal and vertical integration. The clinical exposure to learners will be in the form of **learner-doctor method of clinical training in all phases**. The emphasis will be on primary, preventive and comprehensive health care. A part of training during clinical postings should take place at the primary level of health care. It is desirable to provide learning experiences in secondary health care, wherever possible. This will involve: (a) Experience in recognizing and managing common problems seen in outpatient, inpatient and emergency settings, (b) Involvement in patient care as a team member, (c) Involvement in patient management and performance of basic procedures.

**Clinical Phase – [(Phase III) Third Professional (28 months)]** (a) **Part I (13 months)** - The clinical subjects include General Medicine, General Surgery, Obstetrics & Gynaecology, Pediatrics, Orthopaedics, Dermatology, Otorhinolaryngology, Ophthalmology, Community Medicine, Forensic Medicine and Toxicology, Psychiatry, Respiratory Medicine, Radiodiagnosis & Radiotherapy and Anaesthesiology & Professional development including AETCOM module. (b) **Electives (2 months)** - To provide learners with opportunity for diverse learning experiences, to do research/community projects that will stimulate enquiry, self directed experimental learning and lateral thinking. (c) **Part II (13 months)** - Clinical subjects include: i. Medicine and allied specialties (General Medicine, Psychiatry, Dermatology Venereology and Leprosy (DVL), Respiratory Medicine including Tuberculosis) ii. Surgery and allied specialties (General Surgery, Orthopedics [including trauma]), Dentistry, Physical

Medicine and rehabilitation, Anaesthesiology and Radiodiagnosis) iii. Obstetrics and Gynecology (including Family Welfare) iv. Pediatrics v. AETCOM module

**Duration of clinical postings will be:**

**Second Professional:** 36 weeks of clinical posting (Three hours per day - five days per week: Total 540 hours)

**Third Professional part I:** 42 weeks of clinical posting (Three hours per day - six days per week: Total 756 hours)

**Third Professional part II:** 44 weeks of clinical posting (Three hours per day - six days per week: Total 792 hours) 8.6 Time allotted excludes time reserved for internal/ University examinations, and vacation. 8.7 Second professional clinical postings shall commence before/ after declaration of results of the first professional phase examinations, as decided by the institution/ University. Third Professional parts I and part II clinical postings shall start no later than two weeks after the completion of the previous professional examination. **About 25% of allotted time** of third Professional shall be utilized for integrated learning with pre- and para-clinical subjects. This will be included in the assessment of clinical subjects.

**Table 1: Distribution of subjects by Professional Phase**

Phase & year of MBBS training	Subjects & New Teaching Elements	Duration#	University examination
First Professional MBBS	<ul style="list-style-type: none"> <li>Foundation Course (1 month)</li> <li>Human Anatomy, Physiology &amp; Biochemistry,</li> <li>introduction to Community Medicine, Humanities</li> <li>Early Clinical Exposure</li> <li>Attitude, Ethics, and Communication Module</li> <li>(AETCOM)</li> </ul>	1 + 13 months	Professional
Second Professional MBBS	<ul style="list-style-type: none"> <li>Pathology, Microbiology, Pharmacology, Forensic Medicine and Toxicology,</li> <li>Introduction to clinical subjects including Community Medicine</li> <li>Clinical postings</li> <li>Attitude, Ethics &amp; Communication Module (AETCOM)</li> </ul>	12 months	II Professional
Third Professional MBBS Part I	<ul style="list-style-type: none"> <li>General Medicine, General Surgery, Obstetrics &amp; Gynecology, Pediatrics, Orthopedics, Dermatology, Psychiatry, Otorhinolaryngology, Ophthalmology, Community Medicine, Forensic Medicine and Toxicology, Respiratory medicine, Radiodiagnosis &amp; Radiotherapy, Anesthesiology</li> <li>Clinical subjects /postings</li> <li>Attitude, Ethics &amp; Communication Module (AETCOM)</li> </ul>	13 months	III Professional (Part I)

Electives	<ul style="list-style-type: none"> <li>Electives, Skills and assessment*</li> </ul>	2 months	
Third Professional MBBS Part II	<ul style="list-style-type: none"> <li>General Medicine, Pediatrics, General Surgery, Orthopedics, Obstetrics and Gynecology including Family welfare and allied specialties</li> <li>Clinical postings/subjects</li> <li>Attitude, Ethics &amp; Communication Module (AETCOM)</li> </ul>	13 months	III Professional (Part II)

\*Assessment of electives shall be included in Internal Assessment.

**Table 2: Foundation Course (one month)**

Subjects/ Contents	Teaching	Hours	Self Directed Learning
Orientation <sup>1</sup>	30	0	30
Skills Module <sup>2</sup>	35	0	35
Field visit to Community Health Center	8	0	8
Introduction to Professional Development & AETCOM module	-	0	40
Sports and extracurricular activities	22	-	22
Enhancement of language/ computer skills <sup>3</sup>	40	0	40
Total			175

Based on perceived need of learners, one may choose language enhancement (English or local spoken or both) and computer skills. This should be provided longitudinally through the duration of the Foundation Course. Teaching of Foundation Course will be organized by pre-clinical departments.

**Table 3: First Professional teaching hours**

Subjects	Lectures (hours)	Small Group Teaching/ Tutorials/ Integrated learning/ Practical (hours)	Self directed learning (hours)	Total (hours)
Human Anatomy	220	415	40	675
Physiology*	160	310	25	495
Biochemistry	80	150	20	250
Early Clinical Exposure**	90	-	0	90
Community Medicine	20	27	5	52
Attitude, Ethics & Communication Module (AETCOM) ***	-	26	8	34
Sports and extracurricular activities	-	-	-	60
Formative assessment and Term examinations	-	-	-	80
Total	-	-	-	1736

\* including Molecular Biology. \*\* Early clinical exposure hours to be divided equally in all three subjects. \*\*\* AETCOM module shall be a longitudinal programme.

**Table 4: Second Professional teaching hours**

Subjects	Lectures (hours)	Small group learning (Tutorials / Seminars) /Integrated learning (hours)	Clinical Postings (hours) *	Self - Directed Learning (hours)	Total (hours)
Pathology	80	138	-	12	230
Pharmacology	80	138	-	12	230
Microbiology	70	110	-	10	190
Community Medicine	20	30	-	10	60
Forensic Medicine and Toxicology	15	30	-	5	50
Clinical Subjects	75**	-	540***		615
Attitude, Ethics & Communication Module (AETCOM)		29	-	8	37
Sports and extracurricular activities	-	-	-	28	28
Total	-	-	-	-	1440

\* At least 3 hours of clinical instruction each week must be allotted to training in clinical and procedural skill laboratories. Hours may be distributed weekly or as a block in each posting based on institutional logistics. \*\* 25 hours each for Medicine, Surgery and Gynecology & Obstetrics. \*\*\*The clinical postings in the second professional shall be 15 hours per week (3 hrs per day from Monday to Friday).

**Table 5: Third Professional Part I teaching hours**

Subjects	Teaching Hours	Tutorials/ Seminars /Integrated Teaching (hours)	Self- Directed Learning (hours)	Total (hours)
General Medicine	25	35	5	65
General Surgery	25	35	5	65
Obstetrics and Gynecology	25	35	5	65
Pediatrics	20	30	5	55
Orthopaedics	15	20	5	40
Forensic Medicine and Toxicology	25	45	5	75
Community Medicine	40	60	5	105
Dermatology	20	5	5	30
Psychiatry	25	10	5	40
Respiratory Medicine	10	8	2	20
Otorhinolaryngology	25	40	5	70
Ophthalmology	30	60	10	100
Radiodiagnosis and Radiotherapy	10	8	2	20
Anesthesiology	8	10	2	20
Clinical Postings*	-	-	-	756
Attitude, Ethics & Communication Module (AETCOM)		19	06	25
Total	303	401	66	1551

\* The clinical postings in the third professional part I shall be 18 hours per week (3 hrs per day from Monday to Saturday).

**Table 6: Third Professional Part II teaching hours**

Subjects	Teaching Hours	Tutorials/Seminars / Integrated Teaching (hours)	Self - Directed Learning (hours)	Total* (hours)
General Medicine	70	125	15	210
General Surgery	70	125	15	210
Obstetrics and Gynecology	70	125	15	210
Pediatrics	20	35	10	65
Orthopaedics	20	25	5	50
Clinical Postings**				792
Attitude, Ethics & Communication Module (AETCOM)***	28		16	43
Electives				200
Total	250	435	60	1780

\* 25% of allotted time of third professional shall be utilized for integrated learning with pre- and para- clinical subjects and shall be assessed during the clinical subjects examination. This allotted time will be utilized as integrated teaching by para-clinical subjects with clinical subjects (as Clinical Pathology, Clinical Pharmacology and Clinical Microbiology)

\*\* The clinical postings in the third professional part II shall be 18 hours per week (3 hrs per day from Monday to Saturday). \*\*\* Hours from clinical postings can also be used for AETCOM modules.

**Table 7: Clinical postings**

Subjects	Period of training in weeks			Total weeks
	II MBBS	III MBBS Part I	III MBBS Part II	
Electives	-	-	8* (4 regular clinical posting)	4
General Medicine <sup>1</sup>	4	4	8+4	20
General Surgery	4	4	8+4	20
Obstetrics & Gynaecology <sup>2</sup>	4	4	8 +4	20
Pediatrics	2	4	4	10
Community Medicine	4	6	-	10
Orthopedics - including Trauma <sup>3</sup>	2	4	2	8
Otorhinolaryngology	4	4	-	8
Ophthalmology	4	4	-	8
Respiratory Medicine	2	-	-	2
Psychiatry	2	2	-	4
Radiodiagnosis <sup>4</sup>	2	-	-	2
Dermatology, Venereology & Leprosy	2	2	2	6
Dentistry & Anesthesia	-	2	-	2
Casualty	-	2	-	2
	36	42	48	126