

INTEGRAL UNIVERSITY LUCKNOW



ORDINANCE/REGULATIONS

For

**MASTER OF MEDICAL LABORATORY SCIENCE
(MMLS)
Programmes**

Effective from 2023-24

INTEGRAL UNIVERSITY
Ordinance/Regulations for
MASTER OF MEDICAL LABORATORY SCIENCE (MMLS)
Programmes

University will run the Master of Medical Laboratory Science (MMLS) Programs under the Faculty of Medical Sciences

1. Admission

- 1.1 Admission in Master of Medical Laboratory Science (MMLS) as mentioned in Annexure 1 will be carried out as per the rules prescribed from time to time by the Academic Council of the Integral University (here-in after called University).
- 1.2 The University may take up to 10% additional admission, in view of the short fall expected in 2nd year due to failure of students or students leaving the University.
- 1.3 There shall be no provision for lateral entry into the in Master of Medical Laboratory Science (MMLS).
- 1.4 Once admitted, there shall be no provision of transfer of student to any other program.

2. Eligibility

- 2.1 Eligibility details for admission to various courses of study are given in Annexure 2.
- 2.2 The Academic Council shall have power to amend or repeal the eligibility criteria laid down at clause 2.1, if required.

3. Duration

- 3.1 Total duration of the MMLS Course shall be 2 years, each year comprising of two semesters. Each semester shall have normally 90 working days, or as prescribed by the University from time to time.
- 3.2 A candidate, who has failed in the 1st year twice shall not be allowed to continue the studies further, however, a candidate who has not appeared or has not been permitted to appear in the examination of 1st and / or 2nd semester of the first year may be allowed to appear for one more year on the approval of the Vice-Chancellor.
- 3.3 The maximum time allowed for a candidate in 1st for completing the MMLS course shall be 4 (four) year. If a candidate at any stage of his/her study is found unable to complete it within the said time, he/she shall not be allowed to continue the studies further.

4. Registration

- 4.1** Each student has to register in every semester of the program.

5. Attendance

- 5.1** The attendance of student shall be reckoned from the date of his/her registration in the class.
- 5.2** Each student is normally required to attend all the lectures, tutorials, lab and clinical demonstration classes. However, a minimum attendance of 75% will be necessary. The Dean of the concerned faculty may condone the absence on medical reasons, further upto a maximum 15%.
- 5.3** The Academic Section will consolidate the attendance record for the lectures and practical etc. Attendance on account of participation in the prescribed functions of NCC, NSS, Inter University Sports and functions, Educational Tours, Field Work, Training and curricular/co-curricular activities sponsored by the University shall be credited to aggregate, provided the attendance record duly countersigned by the Teacher Incharge is sent to the Academic Section within two weeks of the function/activity etc
- 5.4** The Deputy Registrar, Academic shall display statement of attendance of students on the notice board of the faculty twice in each semester in case of semester system and quarterly in each year in case of annual system respectively. Notice displayed on the notice board shall be deemed to be an official notification for all concerned. No separate notification to individuals shall be issued.
- 5.5** If student is found to be continuously absent from the classes without proper application and sanction for a period of 30 days or his/her attendance is less than 30% then appropriate action shall be taken against him which may include striking off his name from the rolls. Such a student whose name has been struck off may, however, apply for readmission within 10 days from the date of issue of the notice of striking off his name. The request may be considered by the Dean for readmission. Such a student shall not be readmitted after the prescribed period. The readmission shall be affected on payment of prescribed readmission fees.
- 5.6** A student, who fails to achieve the prescribed minimum attendance as per the provisions of article 3.2 above, shall not be allowed to appear at the End Semester/Annual Examinations and, shall be deemed to have been detained.
- 5.7** Notwithstanding any of the above provisions, under very special circumstances, the Hon'ble Vice Chancellor in consultation with Deans of the Faculty has the power to amend or condone all or any of the above said clauses or the prescribed percentage in the interest of the academics and the University.

6. Curriculum and Credit System

- 6.1** The 2 year curriculum has been divided into 4 semesters and shall include lectures, tutorials, practical, seminars, Dissertation and clinical training, as defined in the scheme of instructions and examinations and executive instructions issued by the University from time to time.

- 6.2** The curriculum will also include such other curricular, co-curricular and extracurricular activities as may be prescribed by the University from time to time.

6.3 Credit System

Each MMLS program will have a curriculum in which every course will be assigned certain credits reflecting its weight and contact periods per week, as given below:

1 Lecture period (L) per week = 1 Credit

1 Tutorial period (T) per week = 1 Credit

1 Practical period (P) per week = 0.5 Credit

In addition to theory and laboratory courses there may be other courses such as seminar, clinical training, dissertation, etc., which will be assigned credits as per their contribution in the program without regard to contact periods.

6.4 Minimum Credit Requirements

The minimum credit required for award of a MMLS degree is **100**. This is normally divided into Theory courses, tutorials, laboratory courses, seminars, clinical training and Dissertation in duration of four semesters. The credits are distributed semester wise as shown in the structure and syllabus manual of each programme. Courses generally progress in sequences, building competencies and their positioning indicates certain academic maturity on the part of the learners. Learners are expected to follow the semester wise schedule of courses given in the syllabus manual of respective programmes.

6.5 The Curriculum Structure

The curriculum for each branch will contain a listing of all courses, with each course having a course category, course number, course title, number of contact periods per week, number of credits assigned, and the marks assigned to various components of evaluation.

Subject Categories

The curriculum will contain subjects in the following categories having credits in the ranges given below in such a way that the total of all credits will be equal to that required for the award of degree. The categories of subjects are:-

S. NO.	Category	Code
1	Departmental Core	DC
2	Departmental Electives	DE
3	Basic Science/Foundation Course	FC

6.6 Course/Subject codes

MMLS Programme: In the syllabus manual of MMLS, subject code is assigned for each course. The subject code consists of six to seven digits. First three digits (letters) indicate the program of a Lab Technology, next digit (letter) indicates course is either core/compulsory or elective or laboratory or seminar or dissertation or Clinical training. A fifth digit (number) indicates semester of a program and sixth & seventh digit (number) indicates serial number of course. An eighth digit

(letter) is only applicable for specialty for course which indicates the specialty to course in that group.

For example-

Core/compulsory course, Elective course, Fundamental, Laboratory course, Seminar, Dissertation

*****C101, ***F101, ***E101, ***L101, ***S201, ***D201**

Where,

First three digits (letters) ***: indicates program name

Fourth digit (letter)

C: indicates Core/Compulsory course;

E : indicates Elective course;

F: indicates Fundamental course;

L : indicates laboratory course;

S : indicates Seminar

D : indicates Dissertation

Fifth digit (number) 1/2/3/4: indicates semester in which that course to be studied

Sixth and Seventh digit (number) 1/3/4: indicates serial number of course

Eighth digit (letter) P/B/M: indicates Specialty for course in a group

The first three letters used in coding of courses indicates respective programmes.

6.7 Approval of the Curriculum

The curriculum of MMLS program will be prepared by the department concerned and will be approved by the Board of Studies of the department. It will then be placed in the Faculty board for approval. Once approved by the Faculty board, it will be placed in the Academic Council for final approval and then the Curriculum will be implemented. Same procedure shall be used for any modification in the Curriculum.

7. EXAMINATION / ASSESSMENT AND GRADING

7.1 Components of Evaluation

Each course will be evaluated out of 100 marks. The courses will normally have the following components of evaluation:

(a) Theory courses:

Continuous Assessment (CA)	60 marks
End-Semester Examination (ESE)	40 marks

(b) Laboratory courses including Seminar, Colloquium, Project, etc.

Continuous Assessment (CA)	60 marks
End-Semester Examination (ESE)	40 marks

7.2 Grading of Performance

6.2.1 Letter Grade and Grade Point Allocation

The Credit and Grading system will be effective from the academic year 2021-2022 for MMLS. In every course, based on the combined performance in all assessments in a particular semester as per the curriculum/syllabus, the student is awarded a letter grade. These letter grades not only indicate a qualitative assessment of the learner's

performance but also carry a quantitative (numeric) equivalent called the Grade Point. The letter grades and their equivalent grade point applicable for **undergraduate** programmes are given below:

Percentage of Marks Obtained	Letter	Grade Points	Performance
85.00 and above	O	10	Outstanding
75.00 – 84.99	A	9	Excellent
70.00 – 74.99	B	8	Very Good
60.00 – 69.99	C	7	Good
50.00 – 59.99	D	6	Fair
45.00 – 49.99	E	5	Average
40.00 – 44.99	P	4	Pass
Less than 41.00	F	0	Fail

A learner who remains **absent** in any form of **evaluation/examination**, **letter grade** allocated to him/her should be **AB** and corresponding **grade point** is **zero**. She/he should reappear for the said evaluation/examination in due course.

7.2.2 SGPI/ CGPI Calculation

7.2.2.1 Semester Grade Performance Index (SGPI)

The performance of a learner in a semester is indicated by a number called Semester Grade Performance Index (SGPI). The SGPI is the weighted average of the grade points obtained in all the courses by the learner during the semester. For example, if a learner passes five courses (Theory/labs./Projects/ Seminar etc.) in a semester with credits C₁, C₂, C₃, C₄ and C₅ and learners grade points in these courses are G₁, G₂, G₃, G₄ and G₅ respectively, then learners' SGPI is equal to:

$$SGPI = (C_1G_1 + C_2G_2 + C_3G_3 + C_4G_4 + C_5G_5) / (C_1 + C_2 + C_3 + C_4 + C_5)$$

The SGPI is calculated to two decimal places. The SGPI for any semester will take into consideration the “**For AB**” grade awarded in that semester. For example if a learner has failed in course 4, the SGPI will then be computed as:

$$SGPI = (C_1G_1 + C_2G_2 + C_3G_3 + C_4 * \text{Zero} + C_5G_5) / (C_1 + C_2 + C_3 + C_4 + C_5)$$

7.2.2.2 Cumulative Grade Performance Index (CGPI)

An up to date assessment of the overall performance of a learner from the time s/he enrolled the University is obtained by calculating a number called the Cumulative Grade Performance Index (CGPI), in a manner similar to the calculation of SGPI. The CGPI therefore considers all the courses mentioned in the curriculum/syllabus manual, towards the minimum requirement of the degree learner have enrolled for. The CGPI is calculated at the end of every semester to two decimal places and is indicated in semester grade report cards.

The CGPI will reflect the **failed status** in case of **F grade(s)**, till the course(s) is/are **passed**. When the **course(s)** is/are **passed** by obtaining a **pass grade** on subsequent examination(s) the **CGPI** will only reflect the **new grade** and not the **fail grades** earned earlier. Example: Up to semester **r** a learner has registered for **n** courses, among which s/he has

“F” grade in i^{th} course. The semester grade report at the end of semester r therefore will contain a CGPI calculated as:

$$CGPI = (C_1G_1 + C_2G_2 + C_3G_3 + \dots + C_i \cdot \text{Zero} + \dots + C_nG_n) / (C_1 + C_2 + C_3 + \dots + C_i + \dots + C_n)$$

Even if a learner has **failed** in a course **more than once**, the course will figure **only once** in the **numerator** as well as the **denominator**. At the end of semester $r+1$ s/he has appeared for examination for k number of courses including the i^{th} **backlog course** and has cleared all the courses including the **backlog course**, the CGPI at the end of this semester is calculated as,

$$CGPI = (C_1G_1 + C_2G_2 + C_3G_3 + \dots + C_iG_i + \dots + C_nG_n) / (C_1 + C_2 + C_3 + \dots + C_i + \dots + C_n)$$

There will also be a **final CGPI** calculated which considers **all the credits earned** by the learner specified for a particular programme.

7.3 Heads of Passing

Continuous Assessment (CA) and End Semester Examination (ESE) shall be two separate heads for passing a subject.

Subjects			
	Continuous Assessment (CA)		End Semester Examination (ESE)
	Unit Exams (UE)	Teacher's Assessment (TA)	ESE
Theory	One Exam per Unit of the syllabus (Max. marks 40; MCQs/SAs/LAs)	i. Assignments (Average of two Assignments per subject) (Max. marks: 10; SAs/LAs, Case studies, Challenge Problems) ii. Quiz (Max Marks: 5) (Average of two quiz per subject) iii. Attendance (Max Marks: 5)	One ESE (Max. Marks 40)
Lab	Two viva-voce/tests (Max. Marks : 40)	i. Lab Report: (Max Marks: 10) ii. Quiz: (Max Marks: 5) iii. Attendance: (Max Marks: 5)	i. Practical Exam ii. Viva voce (Max. Marks 40)
Project/Seminar	-	-	i. Report ii. Presentation iii. Viva voce

Example for CA of theory subjects:

Unit Exam	TA	Quiz	Attendance	Max Marks
One exam per unit; (Average of all but one unit exam marks shall be taken) (Max. marks 40) MCQs/SAs/LAs questions	(Average of two Assignments per subject) (Max. marks 10) (SAs and LAs Case studies, Challenge Problems)	MCQs (Average of two quiz per subject) (Max. marks 5)	(Max. marks 5)	60

The marks in Seminar and Project shall be awarded by a committee, generally consisting of following members, or as constituted by the Head of the Department:

- i. Concerned faculty in charge
- ii. Head of the Department or his/ her nominee
- iii. Senior Faculty Member of the Department nominated by the Head of Department.

7.4 Promotion of Learner and Award of Grades

A student will be declared PASS if,

- He/she secures at least **45%** marks in CA & **35%** marks in ESE.

OR

- If He/she fails in Continuous Assessment but secures **50%** or more in the total (Continuous Assessment + End Semester Examination) in that subject he/she will be declared as PASS.

7.5 Carry Forward of Marks

In case of a learner who does not fulfill criteria mentioned in section 6.4 and fails in the **Continuous Assessment** and/or **End Semester Examination** in one or more courses:

- A learner who **PASSES** in the **Continuous Assessment** but **FAILS** in the **End Semester Examination** of the course shall reappear for the **End Semester Examination** of that course. However his/her marks of the **Internal Assessment** shall be **carried over** and he/she shall be entitled for grade obtained by him/her on passing.
- A learner who **PASSES** in the **End Semester Examination** but **FAILS** in the **Continuous Assessment** of the course shall **reappear** for the **Continuous Assessment** of that course. However his/her marks of the **End Semester Examination** shall be **carried over** and he/she shall be entitled for grade obtained by him/her on passing.

7.6 Re-examination of Continuous Assessment and End Semester Examination

7.6.1 Re-examination for **Continuous Assessment** should be completed before the commencement of next semester theory examination.

Example: A learner who is supposed to reappear for Internal Assessment in semester-I course will appear for the reexamination before commencement of End Semester Examination of semester -II. Re-examination of Continuous Assessment will be based on single examination having same marks as of original assessment. A learner who supposed to reappear for Continuous Assessment will be given some work by the concerned teacher. The work assigned can be of the form of a course project/ assignment problems/ test/ tutorials etc. A learner will do the submission of the assigned work in the predefined period. Records should be maintained properly for all the re-examinations as well as Continuous Assessments.

7.6.2 Re-examination of End Semester Examination will be conducted as per the schedule planned by the University

7.7 Allowed to Keep Terms (ATKT):

1. A learner shall be allowed to keep term for Semester II irrespective of grades obtained in each course of Semester I.
2. A learner shall be allowed to keep term for Semester III if she/he passes each of Semester I and Semester II

OR


She/he fails in not more than **six heads** of passing of which not more than **four** shall be in End Semester Examinations of Semester I and Semester II taken together.

3. A learner shall be allowed to keep term for Semester IV irrespective of grades obtained in each course of Semester III.

Note: **Grade AB** should be considered as **failed** and treated as one head for deciding **ATKT**

or

For promotion from current year to subsequent year a student should not fail in more than the following heads:

Previous year		Current year		Subsequent year	
CA	ESE	CA	ESE	CA	ESE
					
Nil		9	5		
		Max 9 (CA+ESE)			

Note: Grade AB (Absent) should be considered as failed and treated as one head for deciding ATKT.

8. Re-admission in the University

A candidate who has failed and has not been promoted to the higher class will have to repeat the whole year as a regular student. He will be allowed for re-admission on payment of prescribed fees provided he/she satisfies one of the following conditions-

- 8.1** A candidate is declared fail.
- 8.2** A candidate did not appear in a semester examination and or he/she was granted permission for not to appear in the examination on his own request.
- 8.3** A candidate has been detained by the University and has also been permitted to take re-admission.
- 8.4** A candidate promoted with carry over subject and he/she opted for re-admission.

9. Result

9.1 If a student passes all the examinations and fulfills all the requirements for the award of degree his/her result will be shown as **Passed** mentioning letter Grade obtained by the Student.

9.2 The division awarded will be based on the CGPI. Numerical percentage will be calculated by the following formula.

$$y = 6.9 * x + 22$$

Where y is percentage & x is CGPI

First of all the CGPI may be multiplied by a factor of 9 to obtain the numerical percentage.

The division will be awarded as under:

First Division (Honours) 75% and above

First Division 60% and above

Second Division Less than 60%

9.3 Ranks/Positions will be determined at the end of even semesters. Only those Students who fulfill the following conditions will be eligible for ranks/positions:

- (i) They do not have any break in their studies;
- (ii) They have passed every scheduled course in first attempt;
- (iii) They have passed every course on time as per the curriculum;
- (iv) They have earned credits as per the schedule given in the curriculum;
- (v) They have not improved grade in any course after passing the course.

The students who violate any of the above conditions will not be awarded any rank/position. The ranks/positions will be determined on the basis of CPI.

10. Grace Marks:

10.1 A candidate may be awarded grace marks up to a maximum of total 10 marks distributed in maximum four subjects including theory papers, Practical, project, seminar, industrial training and/or aggregate marks in each academic year provided he/she can be declared to have passed the academic year by the award of these marks.

10.2 The grace marks shall not be added to the aggregate marks.

10.3 No grace marks shall be awarded in carry over / re-back/special back examinations.

11. Scrutiny

11.1 Scrutiny shall be allowed in only theory papers for which the candidate has to apply within 15 days after declaration of semester result.

11.2 Re-evaluation is not permitted.

12. Award of Degree

On having successfully completed the program, the student shall be awarded a single Master of Sciences in Medical Laboratory Technology Degree.

13. Cancellation of Admission

The admission of a student at any stage shall be cancelled if:

- (i) He/She is not found qualified as per State Government norms and guidelines or the eligibility criteria prescribed by the University.
Or
- (ii) He/She is found unable to complete the course within the stipulated time as prescribed in clause 4.
Or
- (iii) He/She is found involved in creating indiscipline in the University.
Or
- (iv) He/She is found involved in any criminal case/ has given any false statement.

14. Migration from any other University

A student may be able to transfer credits to another programme within the university, or may be able to transfer credit towards a programme in a different institution with which the university has a formal agreement of mutual credit transfer. Credit transfer depends on whether the accumulated credit is relevant to the programme to which the student wants to transfer.

- 15. For rules of attendance, procedure for assigning of credits and grading of Performance, and unfair means refer to **Latest Common Rules**.
- 16. The academic Council shall have the power to relax or amend any provision provided in the ordinance in any specific matter/ situation subject to the approval of Executive Council of the University.



INTEGRAL UNIVERSITY
MASTER OF MEDICAL LABORATORY SCIENCE (MMLS)
Programmes

List of Master of Medical Laboratory Science (MMLS)
Programmes:

- I.** MMLS-Pathology
- II.** MMLS–Clinical Biochemistry
- III.** MMLS– Hematology

INTEGRAL UNIVERSITY
MASTER OF MEDICAL LABORATORY SCIENCE (MMLS)
Programmes

Eligibility:

Admission to MMLS 1st semester will be made as per the rules prescribed by the Academic Council of Integral University, Lucknow (here-in after called University) from time to time.

2.3 For admission of students through written entrance test/on merit basis & interview (as prescribed by the University)

- (a) Candidates who have passed B.Sc.MLT from recognized institute/collage/University (State government recognized), securing at least 55% marks in the aggregate as compulsory are eligible for admission to 1st year of MMLS.
- (b) NRI/left over seats shall be filled on the basis of qualifying examination provided the candidate meets the eligibility criteria.