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Proposed Academic Ordinances, 6 Semester Diploma Engineering Programmes
University Polytechnic and Women's Polytechnic
To be Effective from Session 2020-21

1. INTRODUCTION

- I-The University Polytechnic, Aligarh Muslim University offers full-time 3-Years (6-Semesters) Diploma Engineering programs leading to Diploma in Civil Engineering, Electrical Engineering, Electrical & Instrumentation Engineering, Electronics Engineering, Computer Engineering, Mechanical Engineering, Leather Goods and Footwear Technology, Architecture, and Interior Design.
- II- The University Women's Polytechnic, Aligarh Muslim University offers full-time 3-Years (6-Semesters) Diploma Engineering programs leading to Diploma in Electronics Engineering, Computer Engineering and Information Technology.
- III-The medium of instruction shall be English.

2. ELIGIBILITY

A candidate will be eligible for admission to Diploma in Engineering if he/she has passed Secondary School Certificate/High School or an equivalent Examination with not less than 45% marks in aggregate of English, Maths and Science as three subjects of equal weightages. Notwithstanding with above provisions, eligibility criteria amended by the University from time to time shall be applicable.

3. ADMISSION

The admissions to the Diploma Engineering programs will be made normally in the beginning of an academic session as per the admission policy approved by the Academic Council of the University from time to time. The admission of each student will be made in a particular branch.

4. ACADEMIC SESSION

The academic session shall be divided into two regular semesters namely 'Odd' and 'Even'. Each semester shall be approximately of 20 weeks' duration. The Odd semester shall normally commence in the month of July/August and the Even semester in the month of December/January. In the beginning of every session, the Dean, in consultation with the Principal, shall notify a detailed academic calendar indicating the schedule of teaching, examination and other activities.

5. DURATION OF PROGRAM

5.1 Minimum Duration

The minimum duration of the program shall be six consecutive semesters after admission.

5.2 Maximum Duration

The maximum duration of the program shall be ten consecutive semesters after admission.

6. Curriculum and Credit System

6.1 Credit System

Each Diploma Engineering 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, colloquium, project, etc., which will be assigned credits as per their contribution in the program without regard to contact periods.

6.2 Course Categories

The curriculum for each branch will contain courses 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 Diploma Engineering as specified elsewhere in these ordinances.

Course Categories	Credit Ranges
Basic Sciences (BS) (Courses such as Physics, Chemistry, Mathematics etc)	20-34
Engineering Sciences & Arts (ESA) (Foundation and applied engineering courses that are used across many branches)	6-20
Humanities and Management (HM) (Language, Social science, & Management)	3-12
Programme Core (PC)	90-120
Programme Electives (PE)	3-12

6.3 Curriculum Development Committee.

There shall be a Curriculum Development Committee (CDC) in each section and also a central CDC for both the Polytechnics. The CDC of a section will be constituted by the board of studies of the concerned section. The central CDC will comprise of the following:

1. A Senior Professor of Faculty of Engineering & Technology nominated by the Dean, as Chairman
2. Chief tabulator, Faculty of Engineering & Technology, as convener

3. Assistant Chief Tabulators of both the Polytechnics
4. Coordinators of CDC of each section, as member.

6.4 The Curriculum Structure

The curriculum for each branch will contain a listing of all courses, with each course having a course number, course title, number of contact periods per week, number of credits assigned, and the marks assigned to various components of evaluation. It will also have a list of alternative courses in the new curriculum for the old curriculum courses. It will also specify all other conditions required for the award of Diploma.

6.5 Approval of the Curriculum

The curriculum for each branch of Diploma program will be prepared by the section concerned and will be approved by the Board of Studies of the section. It will then be vetted by the central CDC and will then be placed in the Faculty along with the recommendations of the CDC for approval. Once approved by the Faculty, the Curriculum will be implemented. The same procedure shall be used for any modification in the Curriculum.

7. Course Registration

7.1 Registration Procedure and Schedule

(a) Every student is required to register, for each semester, for the courses that he/she wants to pursue in that semester. The student will have to choose any of the following modes of registration:

Mode	Requirements
a	Fulfil class attendance requirement and appear in all components of evaluation.
b	Appear in all components of evaluation. Class attendance is not required.
c	Appear in end semester exam only. Previous sessional marks will be considered.

Registration in modes 'b' and 'c' will be permissible only if the student had registered in mode 'a' and fulfilled attendance requirement in an earlier semester. The registration procedure and schedule shall be announced by the Principal for every semester.

- (b) A student who gets admission in Diploma Engineering will be automatically deemed to have been registered for all courses of First semester of Diploma in Engineering.
- (c) A student shall normally register for higher semester courses only if he/she has also registered for un-cleared courses of previous semesters.
- (d) A student shall have an option to add/delete/alter the courses he/she has registered before a date notified by the Principal.
- (e) No student shall be allowed to register for more than 40 credits in a semester.
- (f) If a student fails to register in two consecutive semesters without specific permission from the Dean of faculty, his/her name shall be removed from the rolls of the faculty. Such a student may apply to the Dean for re-admission stating the reasons for not being able to register for two consecutive semesters and the Dean of faculty shall take suitable decision prior to the last date of registration according to the merit of the case.

8 Attendance (In lieu of Chapter XVII of the Academic Ordinances)

Attendance in each course separately is compulsory at least once. Students who have put in 75% or more attendance in a course in a semester will be eligible to appear in the End-Semester Examination of that course. Students who have put in 65% or more but less than 75% attendance in a course may be considered for condonation of shortage of attendance in that course by the condonation committee. Students whose attendance in a course is less than 65% or whose shortage in attendance has not been condoned will not be eligible to appear in the End-Semester Examination of that course and will be awarded grade 'F' in that course. However, in case a student is repeating a course and the student has already fulfilled the attendance requirement in that course, he/she will not be detained due to shortage of attendance in that course during the repeating semester.

9. Examination and Evaluation

9.1 Mid-Semester Examination

Mid-semester examination(s) of each course will be of one hour duration and will be conducted as per norms and schedule notified by the office of the Dean on the recommendation of the Principal in each semester.

9.2 End-Semester Examination

End-semester examination(s) of each theory course shall be of two hours duration and will be conducted as per norms and schedule notified by the Controller of Examination of the University on the advice of the Dean. The end-semester examinations of laboratory/Drawing courses, and other courses such as seminar, colloquium, field work and project etc. shall normally be of two hours duration and will be conducted as notified by the Dean/Principal concerned. End-semester

examinations of some of the laboratory courses may be of higher duration and must be clearly mentioned in the curriculum.

9.3 Make-up Test

Students who miss the Mid-Semester Examination in a course due to some reason or score less than 40% marks in the Mid-Semester Examination may appear in a make-up test. The marks obtained in the make-up test will be reduced by 20%.

9.4 Supplementary Examination

Supplementary examination shall be held only after the results of final (i.e. sixth) semester is declared. Students who have un-cleared credits up to 16 with not more than 4 credits of first to ~~fourth semester~~ will be eligible to appear in the supplementary examinations of un-cleared courses.

9.5 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

Course work	15 marks
Mid-Semester Examination	25 marks
End-Semester Examination	60 marks

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

Course work	60 marks
End-Semester Examination	40 marks

However, for special academic reasons, some courses may have different weight for different components of evaluation from that given above. Such special reasons will be spelt out clearly in the curriculum.

9.6 Grading System

The combined marks obtained by a student in various components of evaluation of a course shall be converted into regular letter grades with their equivalent grade points as specified below

Grade	Grade points	Description
A+	10	Outstanding
A	9	Excellent
B+	8	Very good
B	7	Good
C	6	Average
D	5	Satisfactory
E	0	Unsatisfactory (Fail)
F	0	Detained due to shortage of attendance
I	0	Incomplete/ Absent in the End-Semester Examination
Z	0	Cancelled due to other reasons

The following marks ranges may ordinarily be used for the award of grades to the students in a theory course.

Range	Grade
81 and above	A+
71 and above but less than 81	A
61 and above but less than 71	B+
51 and above but less than 61	B
41 and above but less than 51	C
35 and above but less than 41	D (Minimum Pass Grade)
Less than 35	E

For a lab course the grade ranges will be as follows:

Range	Grade
81 and above	A+
71 and above but less than 81	A
61 and above but less than 71	B+
51 and above but less than 61	B (Minimum Pass Grade)
Less than 51	E

Two grace marks may be awarded by the examiner for passing a course and one grace mark may be awarded by the examiner to elevate the grade. Any fraction in any component of evaluation should be rounded off to the next whole number.

The following distribution of various grades will be considered as normal. In such a case grade range cannot be modified.

Grades	Population Percentage Range	
	Theory Courses	Lab Courses
A+ and A (combined together)	15-50%	25-75%
B+ and B (combined together)	30-70%	25-75%
C and D (combined together)	15-40%	----

For a particular course, if the grade distribution is out of the range as described above, the examiner(s) may propose higher or lower grade, but the final decision rests with the Result Moderation Committee. However, the minimum passing grade should never be awarded if a student secures below 35 marks^A (including 2 grace marks) in a theory course and 51 marks (including 2 grace marks) in a lab course.

9.7 Earned Credits (EC)

If a student passes a course by obtaining grade D or above, he/she earns the credits assigned to that course.

9.8 Performance Indices

At the end of every semester a student's performance will be indicated by Earned Credits (EC), a Semester Performance Index (SPI), and a Cumulative Performance Index (CPI). The SPI is the credit-weighted average of grade points of all courses registered during a semester and is computed as follows:

$$SPI = (C_1G_1 + C_2G_2 + \dots) / (C_1 + C_2 + \dots)$$

Where C_1, C_2, \dots are the credits assigned to courses and G_1, G_2, \dots are the grade points earned in those courses.

The CPI is the credit-weighted average of grade points of all courses registered since admission. In case a student has registered a course more than once, the best grade will be considered for calculation of CPI.

9.9 Repetition of a Course

(a) Failed Courses: If a student registers a course but fails to fulfil attendance requirement, he/she will be required to register the course again in mode 'a' subject to availability of time-table slot. In case the student completes attendance requirement but fails to secure a pass grade in a course, he/she has option of registering the course again either in mode 'b' or in mode 'c'.

(b) Passed Courses: A student may register a course in mode b or c to improve his/her grade in that course only once, provided that he/she has passed that course in a single attempt in the previous Academic Session. For the purpose of calculating the SPI the recently obtained grade will be considered while for CPI the better of the two grades will be counted.

9.10 Conduct of Examinations

The examiners for the End-Semester Examination of all theory courses will normally be the teacher(s) associated with the course. The Seminar, Colloquium courses will be examined by the teacher(s) associated with the course and one or more examiners from among the teachers of the section to be recommended by the BOS of the section concerned. The laboratory and project courses will be examined by the teachers(s) associated with the course and an external examiner recommended by the BOS of the section concerned. In case the external examiner does not turn up for the examination, the Principal, in consultation with the Incharge of the concerned section, shall call another person, other than any of the internal examiners, to act as the external examiner.

9.11 Moderation Committees

(a) Question Paper Moderation Committee: There shall be a Moderation Committee of the concerned Section consisting of the following members to moderate the Question Papers of the End-Semester Examination.

- (i) Incharge of the Section concerned - (Convener)
- (ii) One senior teacher in each broad area of specialization of the Section (to be appointed by the BOS).

Note: The Paper Setter(s) may be invited, if necessary, to clarify the necessary details of the question paper.

(b) Result Moderation Committee: There shall be a Result Moderation Committee of the concerned Section consisting of the following members to moderate course-wise results of the End-Semester Examinations.

- (i) Incharge of the Section concerned - (Convener)
- (ii) One senior teacher in each broad area of specialization of the Section (to be appointed by the BOS).

The Result Moderation Committee will examine the result of each course and in case of an abnormal situation; it may take suitable corrective measures in consultation with the examiner(s).

10. Diploma Certificate Requirement

(a) A student who earns 150 credits subject to the break up in various course categories and fulfils such other conditions as may be mentioned in the curriculum will be awarded the Diploma Engineering Certificate.

he/she must also pay all University dues as per rules. Moreover, there should be no case of indiscipline pending against him/her.

(b) If a student earns more credits than the minimum required for the award of Diploma Engineering, his/her CPI will be calculated by considering the best grades subject to fulfilling the criteria of required credits as specified in the curriculum.

11. Promotion, Name Removal from the Rolls of the University and Mercy Appeal

11.1 Promotion and Name Removal

A student will be promoted from first to second semester if he/she has fulfilled attendance requirements in at least 75% of the courses of first semester. Similarly, a student will be promoted from third to fourth semester and from fifth to sixth semester if he/she has fulfilled attendance requirements in at least 75% of the courses of the odd semester.

The earned credits (EC) of every student will be checked at the end of even number of semesters. The difference between the credits that a student is required to earn by the end of a semester (as per the curriculum) and actual credits earned by the student will be counted as total uncleared credits. The student will be promoted to higher semester if the total uncleared credits is less than or equal to as described in the following table, otherwise his/her result will be declared as "Fail":

Semester	Maximum credit of backlog courses
II	24
IV	24, including not more than 8 credits of first two semesters

If a student gets "Fail/Detained" result more than twice, his/her admission to the Diploma Engg. program will be cancelled and his/her name will be removed from the rolls of the University.

11.2 Mercy Appeal

If the name of a student is removed from the rolls of the University as per provisions of clause 11.1 of these ordinances, he/she may appeal to the Vice-Chancellor stating the reasons for not being able to earn the required credits and the Vice-Chancellor, if he is satisfied with the reasons, may allow the continuation of admission of the student only once during the tenure of the program, extending the total duration of the program by two semesters, at the maximum, beyond 10 semesters, if required. Under no circumstances a student will be allowed to complete the program after the lapse of 12 semesters after admission.

12. Result

(a) If a student passes all the examinations and fulfils all the requirements for the award of degree his/her result will be shown as "Passed".

(b) The Division awarded to "Passed" students will be based on CPI as given below:

First Division (Honours) - CPI \geq 8.5

First Division 6.5 \leq CPI < 8.5

Second Division CPI < 6.5

At the end of each semester the CPI obtained by the student can be converted into equivalent percentage of marks by the following formula:

$$\text{Equivalent Percentage} = 10 \times \text{CPI}$$

(c) At the end of Odd semester examination, result of the students will be declared as "Continued". In case the student has not fulfilled the attendance requirement in 75% of the odd semester courses his/her result will be declared as "Detained". At the end of II and IV semester the result will be as follows:

PASS- if the total uncleared credits is zero

PROMOTED- if total uncleared credits is less than or equal to that described in clause 11.1

FAIL- if total uncleared credits is more than that described in clause 11.1

At the end of VI Semester, if the student fulfils all the conditions for award of Diploma Engineering Certificate, his/her result will be declared as "PASSED", otherwise his/her result will be declared as "FAIL".

(d) If the name of a student is removed from the rolls of the University as per provisions of clause 11.1 of these ordinances his/her result will be shown as "Name Removed".

(e) 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. In case of tie in CPI, rank will be determined on the basis of aggregate marks scored by the students in all the courses.

13. Transitory Clause

Candidates admitted prior to the implementation of these Ordinances shall be governed by the Ordinances (Academic) under which they were admitted. Students who fail in the courses that are no more offered in these new ordinances and new curriculum will be allowed to pass the alternative courses, and in case there are no alternative courses, the old courses may be offered. For such candidates, any marks obtained earlier shall not be taken into account for passing the course(s) and they will have to obtain marks in all components of evaluation afresh. A student admitted previously may apply to the Dean through the Chairman concerned, to be governed by these ordinances. Such cases may be allowed on a case by case basis.

Proposed Regulations of Academic Ordinances (6 Semester Diploma Engineering Programmes)
To be Effective from session 2020-21

1. Explanations

1.1 Course Number:

Every course will have a course number consisting of 7 characters.

- (a) The first character will be "P" for courses offered in University Polytechnic and "W" for courses offered in Women's Polytechnic.
- (b) The second and third characters will be alphabets indicating the broad area of the course as mentioned below:

CE	Civil Engineering
EE	Electrical Engineering
EI	Electrical Instrumentation
ME	Mechanical Engineering
EL	Electronics Engineering
CO	Computer Engineering
AP	Applied Physics
AC	Applied Chemistry
AM	Applied Mathematics
IT	Information Technology
AR	Architecture
EN	English
ID	Interior Design
LF	Leather-goods and footwear technology

- (c) The fourth character will be a number indicating semester of the course.
- (d) The fifth and sixth characters will be interpreted as follows:
 - 01 to 79 : Theory Courses
 - 80-89: Courses such as Seminar, Colloquium, Field Work etc
 - 90-99: Laboratory/Practical courses, Projects, and Dissertation.
- (e) The seventh alpha character will indicate the course category as follows:
C: Program Core (PC); E: Program Elective (PE); S: Basic Sciences (BS) ~~ESA~~: Engineering Science and Arts (ESA), H: Humanities

1.2 Faculty Number

Every student will be assigned a Faculty number consisting of 9 characters which can be interpreted as follows:

- (a) The first two characters will be the right most two digits of the year of admission. Thus students admitted in 2020 will have the first two characters as 20.
- (b) Third character will be 'D' indicating that it is a Diploma Engineering course
- (c) Fourth character will be 'P' for University Polytechnic and 'W' for Women's Polytechnic
- (d) Fifth and sixth characters will be indicating the branch of Diploma Engineering Programme and will be interpreted as follows:
 - AR = Architecture
 - CE = Civil Engineering
 - EE = Electrical Engineering
 - EI = Electrical Instrumentation
 - EL = Electronics Engineering
 - ME = Mechanical Engineering
 - CO = Computer Engineering
 - ID = Interior Design
 - FT = Leather & Footwear Technology
 - IT = Information Technology
- (e) The seventh, eighth and ninth characters will be numerical digits that will identify student of a particular batch.

1.3 Marks

- (a) The combined total marks obtained by a student in the course work and the mid-semester examination will be called Sessional Marks.
- (b) The marks obtained by a student in the end-semester examination will be called Examination Marks.

2. Curriculum

Curriculum of each Diploma Engineering programme will be based on the following guidelines:

- (a) Theory courses can be either of 3 or 4 credits.
- (b) Each semester will have 4 to 5 theory courses and 3 to 4 laboratory courses.
- (c) Programme Elective courses can either be in fifth semester or in sixth semester.
- (d) There should be a Project course spread over fifth and sixth semesters. The total credits allocated to project should be in the range of 8-10, out of which at least 60% weightage should be given to phase-II.

3. Conduct of Teaching

3.1 Course In-charge

Every course will be taught by one or more teachers. The BOS of the concerned section will allocate the teaching load to the teacher(s) and will also designate a course in-charge for each course. If more than one section is involved in the teaching of the course, the course in-charge will be from the coordinating section. The course in-charge will coordinate all the work related to attendance, course work, examination and evaluation. It is necessary that the students are informed about the course in-charge so that they may contact him/her about any problems regarding the course.

3.2 Display of Attendance, Marks etc.

It is essential that the attendance should be displayed to the students twice in a semester, once in the middle and then at the end of a semester by the teacher(s) concerned. The mid-semester marks should be displayed to students normally within 15 days of the examination. The total Sessional marks should be displayed to the students before the beginning of the end-semester examinations. The course in-charge will ensure that the teachers associated with the course make such displays and, in case of complaints from the students in this regard, shall inform the Chairman of the concerned department about the problem.

3.3 Offering Courses

(a) Courses will be offered by the section concerned as per the schedule given in the relevant Curriculum. Sections may also offer a course in both the semesters even though it may be shown in a particular semester.

(b) Program Elective (PE) courses will be offered depending on the availability of the staff and other facilities and therefore any particular elective course may not be offered even though it may exist in the list of possible elective courses.

3.4 Syllabus

Each course will have a syllabus and a teaching schedule which will be made available to the students. The syllabus should include the course number, course title, nature of the course (i.e. theory, practical, seminar etc) credits assigned to the course and number of lecture, tutorial & practical periods per week allocated to the course.

4. Correction of Errors

In case any error is detected in the marks recorded on the award list, the examiner(s) concerned shall make a request to correct the mistake to the Principal, concerned Polytechnic through the Incharge of the concerned section, and shall attach relevant documentary evidence. A committee consisting of the following members shall take suitable remedial measures depending upon the merit of the case.

1. Dean, Faculty of Engg. & Tech. (Chairman)
2. Principal concerned Polytechnic (Convener).
3. Incharge of the concerned Section.
4. One senior member of the section to be nominated by the Principal, Concerned Polytechnic
5. Chief Tabulator, Faculty of Engg. & Tech.

6. Assistant Chief Tabulator, concerned Polytechnic

5. Examinations

5.1 Mid-Semester Examination

Mid-semester examination(s) of each theory course will be of one-hour duration and will be conducted as per norms and schedule notified by the office of the Dean in each semester. There will be no mid-semester examination of laboratory/seminar/field-work courses. However, there will be a mid-term evaluation of project and dissertation courses.

5.2 End-Semester Examination

End-semester examination(s) of each theory course shall be of two hours duration and will be conducted as per norms and schedule notified by the Controller of Examination of the University on the advice of the Dean. The end-semester examinations of laboratory/practical courses, and other courses such as seminar, colloquium, field work, project, dissertation etc. shall be conducted as notified by the Principal/Chairman concerned.