



ARYABHATTA KNOWLEDGE UNIVERSITY,
PATNA

Ordinances

for

Master of Technology (M.Tech.)

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1. INTRODUCTION

MASTER OF TECHNOLOGY COURSE IN ENGINEERING

(Full Time/ Part Time)

Aryabhatta Knowledge University Patna came in operation in March 2010 with the objective to provide a common syllabus and common examination system for all engineering colleges in Bihar. It was made mandatory for the all the Government Engineering colleges which were running under different Universities of Bihar, to be affiliated with AKU Patna.

For the benefit of students it was also decided to run PG courses under AKU. These courses are useful for the students and teachers of technical college for improvement in their skill and knowledge. These courses are also essential for career advancement of the teachers of the technical college. At the same time their researches are always beneficial for the society and for mankind.

1.1 TITLE OF THE COURSE

1.2 The Course shall be called “Master of Technology” hereinafter, abbreviated as M. Tech.
(Subject of Specialization)

1.3 DURATION OF THE COURSE

1.4 There shall be two categories:

- i) Full Time Course and
- ii) Part Time Course

1.5 Full Time Course:

a) The course shall extend over a period of four semesters of total duration of 24 months.

b) Each semester shall have the following schedule:

First Semester: 21 weeks duration

16 weeks course work + 5 weeks of (Preparation + Examination + Vacation)

Second Semester: 21 weeks duration

16 weeks course work + 5 weeks of (Preparation + Examination + Vacation +
Project work Preparation)

Third Semester: 21 weeks duration

16 weeks of course work + 5 weeks [project work Preparation + Examination + Vacation]

W.e.f the academic year 2017-18

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Fourth Semester: 26 weeks duration- Project work Final

1.6 Part Time Course:

- (a) The course shall extend over 6 semesters of total duration of 36 months.
- (b) Each semester shall be of the duration equivalent to that of the semester for full time students, inclusive of teaching, preparation for examination and vacation.
- (c) First, second, third and fourth semester shall comprise of course work and the fifth and sixth semester shall be entirely devoted to Industrial Training wherever applicable and dissertation work.
- (d) The candidate shall register during first and third semesters the subject prescribed for first semester of a full time course and during second and fourth semesters the subjects prescribed for second semester of a full time course.
- (e) The candidate shall register for a maximum of three subjects per semester.

1.7 A Full Time candidate shall be allowed a maximum duration of ten semesters from the first semester of admission to become eligible for the award of Master's Degree, failing which he/she may register once again as a fresh candidate.

1.8 A Part Time candidate shall be allowed a maximum of 12 semesters duration from the first semester of admission to become eligible for the award of Master's Degree, failing which he/she may register once again as a fresh candidate.

1.9 The Academic Calendar shall be fixed by the University from time to time.

2. ELIGIBILITY and CRITERIA FOR ADMISSION

2.1 Admission to the Master of Technology (M.Tech.) shall be open to all the candidates who have passed B.E./B. Sc. Engg./B. Tech. Examinations (in relevant field) or other examinations recognized by AICTE or equivalent.

2.2 Admission to M.Tech. Shall be open to the candidates who have passed the prescribed qualifying examinations with not less than 50% of the marks in the aggregate of all the years of the degree examinations. However, in the case of candidates belonging to SC/ST/PH the aggregate percentage of marks in the qualifying examinations shall not be less than 45%.

2.3 Preference will be given to GATE qualified candidates based on the percentage/percentile of relevant year.

2.4 If seat remains vacant, Non-GATE qualified candidates shall also be considered. However their selection the criteria shall be their performance in qualifying examination and the result of such examination conducted by Admission Committee.

2.5 Each department shall be allocated with few seats under sponsored quota. The admission on such seat shall be made based on performance in qualifying examination as well as their industrial/ institutional experiences in relevant field and also in the examination conducted by the Admission Committee.

2.6 The Admission Committee consists of

| | |
|---|-----------|
| Dean Engineering | -Chairman |
| One member nominated by the Executive Council | - Member |
| One Member nominated by the Academic Council | - Member |
| One member nominated by the Vice-Chancellor, AKU, Patna | - Member |
| The Principal of the concerned college | -Member |
| Head of the concerned department | - Member |
| The Controller of examination, AKU,Patna | -Member |
| Secretary | |

2.7 Only the part time students whose place of working is within radial distance of 100 km from the institution such as academic institution/ University/ industries/ Engineering organization where they seek admission shall take admission for the course.

3. PROGRAMMES AND ELIGIBILITY QUALIFICATIONS FOR M.E./ M. TECH. DEGREE

P.G. Programmes Offered

Eligible Qualification

I. FACULTY OF CIVIL ENGINEERING

1. M.Tech. Environmental Engineering

B.Sc.(Engg.)/ B.E. / B.Tech

1. Civil
2. Chemical
3. Energy & Environmental Engineering
4. Environmental
5. Leather Technology
6. Other relevant branches of Engineering & Technology.

2. M.Tech.Structural Engineering

B.Sc. (Engg.)/ B.E. / B.Tech.(Civil)

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3. M.Tech. Hydrology and Water Resources Engineering

B.E. / B.Tech.

1. Civil
2. Agricultural Engg.

4. M.Tech. Geo(technical Engineering)

B.E. / B.Tech.(Civil)

5. M.Tech. Transportation Engineering

B.E. / B.Tech.(Civil)

6. M.Tech. Irrigation Water Management

B.E./B.Tech.

1. Civil
2. Agricultural Engg.

7. M.Tech. Construction Engineering and Management

B.E. / B.Tech.(Civil)

II. FACULTY OF MECHANICAL ENGINEERING

P.G. Programmes Offered

Eligible Qualification

1. M. Tech. Industrial Engineering

B.Sc. (Engg.)/ B.E./B.Tech.

1. Industrial
2. Mechanical
3. Manufacturing
4. Production
5. Automobile

2. M. Tech. Machine Design

B.Sc. (Engg.)/ B.E. /B.Tech.

1. Mechanical
2. Automobile
3. Manufacturing
4. Production
5. Industrial

3. M. Tech. Manufacturing Engineering

B.Sc. (Engg.)/ B.E. / B.Tech.

1. Production
2. Automobile

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w.e.f the academic year 2016-17.

3. Mechanical
4. Industrial
5. Manufacturing

4. M. Tech. Automobile Engineering

B.Sc. (Engg.)/ B.E. / B.Tech.

1. Automobile
2. Mechanical
3. Production
4. Manufacturing

5. M. Tech. CAD/CAM

B.Sc. (Engg.)/ B.E. / B.Tech.

1. Mechanical
2. Automobile
3. Manufacturing
4. Production
5. Industrial

6. M. Tech. Thermal Engineering

B.Sc. (Engg.)/ B.E. / B.Tech.

1. Mechanical
2. Production
3. Automobile
4. Industrial
5. Manufacturing

7. M. Tech. Industrial Safety Engineering

B.E. / B.Tech.(All Branches)

III. FACULTY OF ELECTRICAL ENGINEERING

P.G. Programmes Offered

Eligible Qualification

1. M. Tech. Power Systems Engineering

B.Sc. (Engg.)/ B.E. / B.Tech.

1. Electrical and Electronics
2. Electronics and Instrumentation
3. Instrumentation and Control

2. M. Tech. Control and Instrumentation Engineering

B.E. / B.Tech.

1. Electrical and Electronics
2. Electronics and Communication

3. Electronics and Instrumentation
4. Instrumentation and Control
5. Electronics
6. Instrumentation

3. M. Tech. Power Electronics and Drives

B.E. / B.Tech.

1. Electrical and Electronics
2. Electronics and Communication
3. Electronics and Instrumentation
4. Instrumentation and Control
5. Electronics
6. Instrumentation

IV. FACULTY OF LEATHER TECHNOLOGY

P.G. Programmes Offered

Eligible Qualification

1. M.Tech. Leather Technology

B.E. / B.Tech. (Leather Technology)

2. M.Tech. Footwear Science and Engineering

B.E. / B.Tech.

1. Leather
2. Mechanical
3. Textile Technology

Note: Admission shall be offered only to the candidates who possess the qualification as prescribed above against each programme.

4. PAPER SETTING AND EVALUATION

4.1 Question papers in theory subjects shall be set by the Examiners appointed for that purpose by the University.

4.2 The theory Answer papers shall be evaluated by the examiner appointed by the University.

5. ATTENDANCE REQUIREMENT

5.1 Each course of semester shall be treated as a separate unit for calculation of the attendance.

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- 5.2 A candidate shall be considered to have satisfied the attendance requirement if he/she has attended not less than 75% of the classes in each subject of all the semesters (Theory, Laboratory, Seminars, Industrial Training and Dissertation work, etc.) actually conducted up to the end of the semester.
- 5.3 A candidate, who does not satisfy the attendance requirement as mentioned above shall not be eligible to appear for the Examination of that semester and shall be required to repeat that semester along with regular students during the subsequent year.
- 5.4 If a candidate, for any reason, discontinues the course in the middle, he/she may be permitted to register to continue the course along with subsequent batch, subject to the condition that he/she shall complete the class work, laboratory work and seminar including the submission of dissertation within maximum stipulated period. Such candidate shall not be eligible to be considered for the award of rank.
- 5.5 The list of the candidates falling short of attendance shall be sent to the University at least one week prior to the commencement of the examination.

6. INTERNAL ASSESSMENT (IA)

- 6.1 A candidate shall obtain not below the Grade D prescribed for the Internal Assessment of each subject, including seminars if any.
- 6.2 Internal Assessment Marks shall be based on assignments, tests, oral examinations and seminar conducted in respective subjects (minimum of two tests are compulsory).
- 6.3 Candidates obtaining less than D Grade in the Internal Assessment in any subject shall not be eligible to appear for the examination in that subject(s). Only in such cases, the Principal / Head of the Department shall arrange for the improvement of Internal Assessment marks in the subject(s) in subsequent semester.
- 6.4 The candidates shall write the Internal Assessment Test in Blue Books which shall be maintained by the Principal/Head of the Department for at least one month after the announcement of result and available for verification as per the direction of the Registrar (Evaluation).

- 6.5 The Internal Assessment marks list shall be displayed on the Notice Board and corrections, if any, shall be incorporated before sending to the University.
- 6.6 The Internal Assessment marks shall be sent well in advance before the commencement of theory examination by the Principal. No corrections of the Internal Assessment marks shall be entertained after the submission of obtained marks to the University.

7. DISSERTATION WORK

- 7.1 The topic and title of the dissertation shall be chosen by the candidate in consultation with the guide and co-guide, if any, during the second semester itself. However, modification of only the title but not the field of work may be permitted at the time of final submission of dissertation report during the fourth semester. The subject and topic of the dissertation shall be from the major field of post graduate studies of the candidate and the synopsis comprising scope and approach to the topic shall be prepared and submitted to the Registrar (Evaluation) through the Principal of the institution within 30 days from the start of the third semester.
- 7.2 The dissertation work shall be carried out by each candidate independently during the third and fourth semester under the guidance of one of the faculty members of the concerned Department of the Institution. If the dissertation assignment is of interdisciplinary nature, a co-guide shall be taken from the same or any other relevant department.
- 7.3 If a dissertation work has to be carried out in any industry/ factory / organization, outside the campus, the permission to that effect (NOC from the concerned industry/ factory / organization) and the name of co-guide at any of these organizations shall be intimated to the University at the beginning of third semester by the Principal of the College.
- 7.4 Every Candidate shall submit a report of the dissertation work duly approved by the guide and the co-guide, if any, at the end of the final semester, i.e., at the end of fourth semester in case of full time students and at the end of sixth semester in case of part time students. The dissertation work shall be countersigned by the guide, co-guide, if any, Head of the Department and Head of the Institution.

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- 7.5 The candidate shall submit four copies of the dissertation work to the Head of the Institution. The Principal shall arrange to send three hard copies of the report to the University for evaluation.
- 7.6 The date of submission of the dissertation may be extended up to a maximum of five academic years for full-time students and maximum of six academic years for part-time students, from the date of commencement of the first semester in which the candidate has taken admission to the course.
- 7.7 The dissertation shall be evaluated by two examiners - one internal examiner (guide/co-guide) and one external examiner appointed by the University. The external examiner shall preferably be from outside the State. The evaluation of the dissertation shall be made independently by each examiner.
- 7.8 A copy of the dissertation shall be sent to each Examiner by the University for Evaluation.
- 7.9 The examiners shall evaluate and send the marks independently to the Registrar /Controller of Examination
- 7.10 Examiners shall evaluate the dissertation normally within a period of not more than three weeks from the date of receipt of dissertation. The dissertation shall not be accepted for passing if external examiner finds that the dissertation work and the report are not up to the expected standard and the minimum passing marks cannot be awarded. The external examiner can totally reject the dissertation or ask for its modification. The examiner shall give reasons for rejection of the dissertation or requiring its modification and where modification in the dissertation is required he / she can make suggestion for improvement of the dissertation for resubmission. In case where modification is recommended after incorporating suggestions, the dissertation report shall be sent to the same external examiner.
- 7.11 If the examiner does not approve the dissertation on its re-submission, it shall be treated as rejected. After the rejection by the first external examiner, it shall be sent to a second examiner appointed by the University. If the second examiner also does not approve the dissertation, the candidate shall have to register once again for the fourth

semester, in the case of full time student and sixth semester, in the case of part-time student with the University and shall submit the dissertation within the stipulated time.

- 7.12 The candidate may also choose another topic of dissertation under a new guide, if necessary. In such an event, the report shall be submitted within five years in case of full time student and six years in case of part time student respectively from the date of admission to the course. The Examiners shall be appointed as per the norms of the University for the Evaluation of dissertation.
- 7.13 If the dissertation' report is approved, as per regulation, a viva-voce examination of the candidate shall be conducted by the external examiner and internal examiner /guide. The external examiner, who will be appointed by the University, shall be contacted by the Principal/Head of the Department. Internal examiner as per the direction of the University to arrive at a mutually convenient date for the conduct of viva-voce examination of the concerned candidate with intimation to the Registrar/Controller of Examination of the University. In case one of the examiners expresses his inability to attend the *viva-voce*, a substitute examiner in his place be appointed by the University.
- 7.14 The marks awarded by both the Examiners at the *viva voce* Examination shall be sent jointly to the University immediately after the examination.
- 7.15 Examination fee shall be decided from time to time by the University.

8. ELIGIBILITY FOR PASSING

- 8.1 There shall be University examination at the end of each semester.
- 8.2 The minimum passing marks, SGPA/ CGPA criteria or grading for promotion to the subsequent Semester shall be as that of B.Tech Programme of the University.
- 8.3 The calculation SGPA/CGPA criteria shall be similar to that of the B.Tech Programme of the University.
- 8.4 The candidate with a maximum of two backlog subjects of first year shall be eligible for taking admission to second year (III semester).

However for part time candidate with one backlog subject shall be eligible for taking admission to odd semester

8.5 The candidate has to pass in all the subjects of all semesters before the submission of thesis for viva-voce examination

9. AWARD OF CLASS AND RANK

9.1 Candidates who have passed in all the subjects of first, second and third semesters and the dissertation work of fourth semester shall be declared to have passed the course.

9.2 Candidates who have rejected as per the regulation or discontinued the course as per regulation or do not submit the dissertation report within 46 weeks (3rd and 4th semester) as per regulation, are not eligible for award of degree.

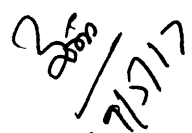
10. FINANCIAL ASSISTANCE

Financial assistance will be provided the qualified candidates as per MHRD norms.

11. RESERVATION

Reservation of seats will be as per the Govt. rules.

Note : Paper Code of the subjects will be decided by the University.


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Abstract

The purpose of this study was to determine whether there were differences in the prevalence of self-reported depression between men and women who had been exposed to violence during childhood and adulthood. Data from the National Longitudinal Study of Adolescent Health (*N = 9,800*) were used to examine the association between exposure to violence and self-reported depression among adolescents. Results showed that exposure to violence during childhood and adulthood was associated with higher rates of self-reported depression. The association between exposure to violence and self-reported depression was stronger for women than for men.