THE UNIVERSITY OF BURDWAN

UNIVERSITY REGULATIONS (REVISED) RELATING TO FOUR YEAR B E (BACHELOR OF ENGINEERING) COURSES OF STUDIES

(Effective from the academic session 2011-2015 onwards and also for the students of academic session 2008-2012, 2009-2013 & 2010-2014 (for the remaining parts of their respective examination)

(Approved by the Executive Council on 18.07.2011 vide item no. 64)

U.Reg.1 Engg) Admission and Registration

Admission of General Students: Any candidate who has passed the Higher Secondary Examination in the 10+2 system School Education with Mathematics, Physics and Chemistry or any other subjects as may be specified by the All India Council for Technical Education (AICTE) and Director of Technical Education, West Bengal (DTE, WB) from time to time and any candidate possessing the equivalent qualification recognized by the University, DTE, WB and AICTE with specified percentage of marks, if any, as may be prescribed by the AICTE & DTE for the purpose may be admitted to the First Year (First Semester) of the four year Degree Course leading to Bachelor of Engineering (B E) degree in Engineering/ Technology of this University subject to fulfillment of usual norms of medical fitness criterion and may be registered with the University as per the University ordinances relating to the Registration of Students.

U. Reg.2 (Engg) Admission of Lateral Entry Students

Polytechnic diploma holders in different branches of engineering and such other candidates as defined by DTE from time to time shall be eligible for admission to the degree course of Engineering / Technology in 2nd year against the approved seats specified for them under the following terms and conditions:

- (a) They have passed diploma course from any AICTE approved polytechnic college or any other courses considered equivalent qualification as may be prescribed by the AICTE or DTE, WB with minimum percentage of marks in the relevant discipline.
- (b) They will be eligible in such branches of engineering as are specified by the DTE, WB with respect to their actual branch of Engineering in the diploma level.

U. Reg.3 (Engg) Change of Branch in the 3rd Semester

A candidate may be allowed to change his/her branch of study subject to availability of the vacant seats against the approved intake of the particular branch subject to fulfillment of the following terms and conditions:

- (a) Vacancy shall be filled up in order of position of the candidate in the merit list of the students applied for branch change in the 3rd semester of their study to be determined on the basis of SCPA of 1st Semester or average SCPA of 1st and 2nd semester (when result of 2nd Semester is available).
- (b) The candidates has passed 1st Semester or 1st and 2nd semester (when result of 2nd Semester is available) without any back paper.
- (c) The candidate has secured at least 70 % SCPA to be eligible for such opportunity.
- (d) The total strength of the branch from which candidate(s) are willing to change their branch shall not ordinarily fall below $2/3^{rd}$ of the approved intake of the branch.

U. Reg.4 (Engg) Duration of the

Course

- (i) The 4 year Course as stated in U.Reg.1 (Engg) shall be divided into 8 independent Semesters with two semesters (Odd Semester July to December and Even Semester January to June) in one academic year.
- (ii) The number of teaching weeks in each semester shall be 16 to 18 with a minimum of 90 teaching days excluding the period of final examinations.
- (iii) Academic calendar indicating all major events of a academic session must be published before the start of academic session.

U. Reg.5 (Engg) Branches of studies

The subjects prescribed in the BE Examinations and the Credit Units for each Subject are to be shown in the Curriculum for the Four Year Engineering Courses. Every candidate for the BE Examinations shall be examined in the Subjects mentioned in the Curriculum under respective heads. The Degree of Bachelor of Engineering shall be conferred on students who have followed the prescribed curriculum of suitable subjects for not less than 8 academic semesters (6 academic semester for lateral students) in any one of the following branches and have successfully passed the Examinations:

- 1. Electronics & Communication Engineering
- 2. Computer Science and Engineering
- 3. Information Technology
- 4. Applied Electronics & Instrumentation Engineering
- 5. Civil Engineering
- 6. Electrical Engineering

and any other branch that may be introduced in future.

U. Reg.6 (Engg) Semester

system

There shall be eight separate regular examinations for the Degree of Bachelor of Engineering (B.E.), Viz.

- (i)First semester Regular
- (ii) Second semester Regular
- (iii) Third semester Regular
- (iv) Fourth semester Regular
- (v) Fifth semester Regular
- (vi) Sixth semester Regular
- (vii) Seventh semester Regular
- (viii) Eighth semester Regular

Examinations. Each such regular examination will be held at the end of each semester. The date and venue shall be notified by the Controller of Examinations of the University.

However the lateral entry candidates shall continue from third semester onwards.

U. Reg.7 (Engg) Class attendance

- (i) A candidate may be allowed to appear at a semester examination provided he / she has been certified by the Principal of the college/institute to have prosecuted a regular course of study prescribed for the purpose for one academic semester and found eligible to appear at the examination.
- (ii) A candidate must attain a minimum of 75% average attendance of all the theory and practical classes held during the session. A candidate may be allowed to appear in the semester examinations with a minimum of 60% average attendance under sufficient medical ground or grounds like participation in cultural, sports, other academic (like attending vocational training, etc) or official assignments in the interest of the Institution / University / Government with the satisfaction of the authority against payment of the condonation fee amounting to Rs 600.00 (Rupees Six Hundred only).
- (iii) Attendance in individual subjects must not fall below 50% even when the average attendance reaches minimum 60% or above. If any candidate fails to attain the minimum attendance in any one individual subject, he/she will not be allowed to appear in the whole semester examination.

<u>U. Reg.8</u> (Engg)

Issue of admit card for examinations

Admit card for an examination will be issued to a candidate provided (i) he / she is registered with the University, (ii) he / she has prosecuted the prescribed course of study, (iii) he / she is eligible for regular or back paper examination (as the case may be) as per U.Reg 6(Engg) of the Regulation, (iv) his /her application for appearing in the examination and certificate from the Principal in prescribed form with stipulated fees have been deposited within the prescribed date to be notified by the Controller of Examinations. The fees will be prescribed and may be revised by the University from time to time.

U. Reg.9 (Engg)

A candidate shall be allowed to appear in an examination (Regular/Back – paper) only on production of the 'Admit card' issued by the University for the Examination.

U. Reg.10 (Engg) Pass marks

In order to pass in any of the semester examinations, a candidate must have to obtain 40% of the full marks in each of the theoretical subjects and 50% of the full marks in each of the sessional and practical subjects individually.

No separate minimum aggregate marks will be required to pass the examination.

U. Reg.11 (Engg) Back paper examinations

The unsuccessful candidates of regular examinations will be called as back paper candidates and they will appear in the regular examinations of the next academic year, if otherwise eligible, for clearing the back papers. However, after the publication of results of Seventh Semester and Eighth Semester Regular Examinations, there will be special back paper(s) examinations for the unsuccessful candidates. The time/schedule of such examinations will be decided as per the convenience of the academic calendar avoiding disturbance of the normal academic activities. If the candidates of seventh semester special back paper examination(s) and eight semester special back paper examination(s) fail to clear the back (un-cleared) papers, they will have to appear in the regular examination(s) of the next year, if otherwise eligible. There shall not be any special back paper examination from first to sixth semester examination for unsuccessful candidates.

<u>U. Reg.12</u> (Engg)

If a candidate fails to clear one or more theory or sessional or practical subjects, he/she will have to appear in those back (un-cleared) subjects as back paper candidate [along with other back paper(s) in other semester(s) if any] in the next academic session, if otherwise eligible.

However they can continue as regular candidates up to eighth semester along with back paper(s) of any semester.

U. Reg.13 (Engg) Coincided papers

However, if in the examination schedule, there is/are coincidence(s) in theory or sessional or practical subjects / papers of regular examinations and back paper examinations, the candidate have to choose one of them of his/her choice to appear in that examination. He/she shall appear the other paper(s) of the coincided examination in the next academic session.

U. Reg.14 (Engg) Maximum duration

A candidate has to pass in all the papers of the First to Eighth Semester within eight years (seven years for lateral entry students) from the date of his / her admission to the First semester (3rd semester of lateral entry) of the Four Year degree courses of Engineering of this University, failing which he / she will be debarred from continuing his / her studies and appearing at the final examinations.

<u>U. Reg.15</u> (Engg)

Pass marks [as in U.Reg.10 (Engg)] in the theory or sessional or practical subjects / paper(s) obtained in the particular semester examination will be retained within the prescribed period/chances as laid in U.Reg. 14 (Engg) in that subject throughout his / her studies in the College/Institute and he / she will be neither required nor allowed to appear in that paper again.

However, the marks obtained by a candidate in 'Continuous Assessment (CA)' (i.e. 30 marks out of 100 in theory subjects) during attending regular semester classes will remain unchanged and be brought forward in the subsequent examination of the concerned subject.

<u>U. Reg.16</u> (Engg)

To be entitled to the degree of Bachelor of Engineering in any branch a candidate has to pass separately all the papers of all semester examinations of particular branch.

Degree award

<u>U. Reg.17</u> (Engg)

Issue of Marksheets

- (i) At the end of semester University Examination will be of normally 3 hours duration for 70 full marks.
- (ii) Normally, maximum questions will be 1.5 times of full marks for giving alternatives.
- (iii) For every examination separate Marksheet indicating the candidate's performance will be issued indicating academic session and date of publication of result.
- (iv) When a candidate passes all the subjects of a semester in more than one attempt, he/she will be issued a comprehensive Marksheet indicating that he/she has passed all the subjects in that semester.

U. Reg.18 (Engg) Credit System, SCPA, TCPA

Weightage of a subject will depend on its weekly contact hours and will be expressed in terms of Credit Units. One contact hour per week in the form of Lecture, Tutorial or Practical will be counted as one Credit Unit for both Theory and Sessional subject. The final Viva voce examination which does not have any contact hour, is given four Credit Units for each branch of Engineering normally based on the curriculum.

The overall performance of a student in a semester will be expressed in terms of weighted percentage of marks called 'Semester Credit Point Average (SCPA)'.

The percentage of marks obtained in each subject (Theory, Practical and Sessional) will be multiplied by its Credit Unit to obtain the Credit Point in the subject. The Credit Point of all the subjects in a semester will be added to obtain the total Credit Point in a semester. The total Credit point will then be divided by the sum of the Credit Units of all the subjects in the semester, to arrive at the SCPA scored by a candidate in the semester.

U. Reg.19 (Engg) Award of degree

While awarding B E degree, the final assessment of a student's performance will be done on the basis of the 'Total Credit Point Average' (TCPA) to be calculated as follows:

The semester Weightage in the Total Credit Point Average (TCPA) shall be 0.04 for the First semester, 0.08 for the second semester, 0.12 for the Third semester, 0.12 for the Fourth semester, 0.16 for the Fifth semester, 0.16 for the Sixth semester, 0.16 for the Seventh Semester and 0.16 for Eighth semester. The SCPA scored by a candidate in each of the eight semesters will be added after multiplying each with the corresponding Semester Weightage to get the TCPA of the candidate.

However, for lateral entry candidates, the SCPA scored by a candidate in each of the six (third to eighth) semesters will be added after multiplying each with the corresponding Semester Weightage and shall be divided by 0.88 to get the TCPA of the candidate.

N. B. Both SCPA and TCPA are percentage marks.

<u>U. Reg.20</u> (Engg)

Class of degree and honours

A candidate who has passed all the subjects of all the eight Semesters of the Course of Study will be awarded the following Class:

- (i) <u>First Class Honours:</u> Provided he / she has secured a TCPA of 75% or more, having appeared all the subjects of the Examinations of all the eight Semesters of the Course of Study appearing at the Regular Examination only and within four academic years from his/her first admission to the First semester Course of Study. Provided further that, if a candidate securing a TCPA of 75% and above, fails to appear in a regular examination once only owing to medical ground during his / her entire course of study but passes the subjects in the immediately following back paper / special back paper examination, he / she may be awarded First Class Honours also.
- (ii) <u>First Class Pass:</u> Provided that he / she has secured a TCPA of 60% or more and is not eligible for First Class Honours.
- (iii) Second Class Pass: Provided he / she has secured TCPA of less than 60%.

U. Reg.21 (Engg) Year of

(i) The TCPA results of VIII Semester Examination of those candidates, who will not qualify their previous semester examination, will be published as 'SNC' i.e. Semester(s) not cleared and their TCPA mark sheets will not be issued.

passing of final Examination (ii) If a candidate after qualifying his/her final (8th) semester examination, clears his/her back Semester(s) Examination(s) within the prescribed chance(s), he/she would be declared to have passed the final examination in the year in which he/she clears his/her back Semester(s) Examination(s) and their TCPA mark sheets will be issued accordingly.

<u>U. Reg.22</u> (Engg)

Post-Publication Scrutiny of answer scripts

- 1. Post publication scrutiny does not imply re-examination or re-assessment of scripts but involves verification of scripts and records to ascertain
 - (a) marks have been assigned to each of the required number of answers made by an examinee as per instructions printed on the question paper
 - (b) totaling of marks awarded by the examiners on the scripts / mark slips, as the case may be, has correctly be done
 - (c) posting of marks has been made correctly from
 - (i)answer scripts to mark slips
 - (ii) mark slips to tabulation sheets and
 - (iii) tabulation sheets to mark-sheets.
- 2. There shall be no Post-Publication Scrutiny of Practical / Sessional Papers.
- 3. A candidate applying for post publication scrutiny of his / her answer-scripts shall have to accept the change in marks, if any, after post publication scrutiny.

If any dispute arises as to the interpretation, intention or application of any of the provision of these Regulations or any matter not covered by this regulations, the decision of the Executive Council in this regard shall be final and binding.

<u>U. Reg.23</u> (Engg)

Rules Related to Examination of four year B E (Bachelor of Engineering) Courses of Studies

Rule 1 Process of awarding marks in continuous assessment process

For the first to eight semester examination of the subsequent four year course each subject (Theory and Sessional) will carry full marks of 100.

There will be continuous assessment (CA) on the progress of a student in his studies with regard to all the theory subjects. For each of the theory subjects, 70 % marks will be allotted for the End-of-semester University Examination and 30% marks for Continuous Assessment.

Of the 30% marks allotted for continuous assessment in the theory subjects, 20% will be allotted for one mid semester examination and two class tests / two mid semester examinations to be conducted the departments under responsibility of the head/in-charges and 10% for attendance in Lecture and Tutorial Classes.

The marks for attendance will be awarded as per following scheme provided that the attendance of a student in a particular subject will be counted only if at least 24 numbers of classes be held for theoretical subject and 6 days of practical classes be held in the concerned semester.

Attendance in the class (in %)	Marks to be awarded (in %)	Attendance in the class (in %)	Marks to be awarded (in %)
Minimum of 50	50	More than 70 to 80	80
More than 50 to 60	60	More than 80 to 90	90
More than 60 to 70	70	More than 90	100

Rule 2 Process of awarding marks in practical / sessional examinations

(i) In case of practical papers, the 100 full marks to be distributed as follows normally:

Attendance: 10 %
Class performance: 30%
Regular report preparation: 20%
Final examination: 30%
Teacher's own discretion: 10%

(ii) In case of sessional papers (like project, seminar etc), the 100 full marks to be distributed as follows normally:

Attendance: 10 %
Regular performance: 20%
Report preparation: 20%
Final examination: 30%
Departmental discretion: 20%

(iii) In case of sessional papers (like grand viva etc), the 100 full marks to be distributed as follows normally:

Final examination: 70% Departmental discretion: 30%

Rule 3 Examination procedure

Examination procedures:

- (i) The recommendations of the Board of studies of the Engineering Faculty in connection with the names of the paper-setters, Moderators, Examiners & Scrutineers etc are to be made in a prescribed format to be provided by the Engineering cell of the Controller of Examinations' Department.
- (ii) After the completion of assessment works within the stipulated period, the concerned examiners are required to submit the marks after assessment of answer scripts of the respective subjects to the concerned Head Examiner where there would be a Head Examiner and the Head Examiner should submit the same before the Engineering Cell of the Controller of Examinations' Department.
- (iii) The scrutiny of the answer scripts is to be held in two phases. The first one is at the stage of Pre-publication of results and the next one at Post-publication of results on

	submission of usual fees and forms. The concerned Head Examiner of the respective subjects are required to scrutinize the answer-scripts before the publication of results. For the purpose a teacher other than the Examiner(s) of the concerned subject is generally to be given the assignment to perform the job of the pre publication Scrutiny works under the supervision of Head Examiner whereas post-publication scrutiny should be made by the person as to be appointed by the Controller of Examinations with prior approval of the Vice-Chancellor / Pro Vice-Chancellor.
Rule 4 Post publication scrutiny	The application of the Post Publication Scrutiny duly filled in and signed is to be submitted normally within 10 days (as to be notified by the Controller of Examinations) from the date of issue of mark sheets to the office of the Controller of Examinations.
Rule 5 Role of Head Examiners	 (i) Just after completion of the examination the Head Examiner should take necessary initiative so that the answer scripts of the relevant subject/paper be distributed among the examiner(s) concerned for assessment. (ii) The Examiners should have to assess the answer scripts immediately after the completion of the examination of the paper/subject and submit the assessed answer scripts along with award slip duly signed by him/her to the Head Examiner concerned for processing. Marks should not be sent to the office of the Controller of Examinations by the examiner where there is a Head Examiner. (iii)Head Examiner shall recommend the names of Scrutinizer for completion of scrutiny works following the process as in U.Reg.22(Engg)(1). On the basis of recommendation of the head examiner the Controller of Examinations will issue the appointment of Scrutinizer and be sent to the Head examiner. (iv)Head examiners shall reevaluate at least 5% of the answer scripts examined by the examiner concerned. In case, variation of award of marks is found to be more than 10%, the matter may be brought into notice of the Controller of Examinations and the Chairpersons of the Board of Under graduate studies concerned for further decision, if any. (v) Head Examiners shall submit all the marks of examinations including CA (after collecting from concerned Subject Teacher/Head/In-charge of the Department) duly signed by the examiner, head examiner and scrutinizer, if any. (vi)On the basis of requisition as to be made by the Controller of Examinations the Head Examiner shall have to make necessary arrangement for sending the answer scripts in sealed cover to the office of Controller of Examination for Post Publication Scrutiny works. The Head examiner may re-check the answer scripts before sending the same to the office of the Controller of Examinations for post publication scrutiny works. (vii) Any discrepancy in this regard must brought into the notice of the Controller of