#### THE UNIVERSITY OF BURDWAN

## UNIVERSITY REGULATIONS (REVISED) RELATING TO FOUR YEAR

## B E (BACHELOR OF ENGINEERING) COURSES OF STUDIES

(Effective from the academic session 2018-2019 onwards)

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 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
U. Reg.2 (Engg)	Students. Registration number has to be given to newly admitted student before the commencement of 1" semester examination.  Polytechnic diploma holders in different branches of engineering and such other candidates as defined by AICTE or DTE from time to time shall be eligible for
Admission of Lateral Entry Students	admission to the degree course of Engineering / Technology in 2nd year against the approved seats specified for them under the following terms and conditions:  • They have passed diploma course from any AICTE approved polytechnic 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.  • 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.  • Registration number should have to be given to newly admitted lateral entry student before the commencement of 3 <sup>rd</sup> semester examination.
U. Reg.3 (Engg) Change of Branch in the 3"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:  (i) 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 3 <sup>rd</sup> semester of their study to be determined on the basis of CGPA of 1 <sup>rd</sup> and 2 <sup>rd</sup> semester (when result of 2 <sup>rd</sup> Semester is available).  (ii) The candidate has passed 1 <sup>rd</sup> Semester or 1 <sup>rd</sup> and 2 <sup>rd</sup> semester (when result of 2 <sup>rd</sup> semester is available) without any back paper.  (iii) The candidate has secured at least 7.0 SGPA/CGPA (CGPA being available) to be eligible for such opportunity.  (iv) The total strength of the branch from which candidate(s) are willing to change their branch shall not ordinarily fall below 2/3rd of the approved intake of the branch.
U. Reg.4 (Engg) Duration of the Course	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.

	2. The number of teaching weeks in each semester shall preferably be 18 to 20 with a minimum of 90 teaching days excluding the period of final examinations.  3. Academic calendar indicating all major events of an 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 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 entry students) in any one of the following branches and have successfully passed the Examinations:  1. Computer Science and Engineering 2. Electronics & Communication Engineering 3. Information Technology 4. Applied Electronics & Instrumentation Engineering 5. Civil Engineering 6. Electrical Engineering
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 Examinations.  (ii) Second Semester Regular Examinations.  (iii) Third Semester Regular Examinations.  (iv) Fourth Semester Regular Examinations.  (v) Fifth Semester Regular Examinations.  (vi) Sixth Semester Regular Examinations.  (vii) Seventh Semester Regular Examinations.  (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	<ul> <li>(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.</li> <li>(ii) A candidate must attain a minimum of 75% average attendance of all the theory and practical classes held during the session. However, 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 condemnation fee amounting to Rs. 1000/- (Rupees one thousand) only.</li> <li>Moreover the condemnation fee may be waived by the Principal under special consideration in the event such as severe medical ground/ hospitalization, attending official assignments in the interest of the Institution/ University/ Government.</li> <li>(iii) Attendance in individual subjects must not fall below 40% and individual practical 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.</li> </ul>

	(iv) Attendance records per subject must be displayed before or after the mic semester examination to give a scope to students for improvements.
U. Reg.8 (Engg) Issue of Admit Card for examinations	and the property of the proper
U. Reg.9 (Engg) Admit Card	A candidate shall be allowed to appear in an examination (Regular/Back - paper) only on production of the 'Admit card' issued by the Controller of Examinations, BU.
U. Reg.10 (Engg) Pass marks	In order to pass in any of the semester examinations, a candidate must have to obtain 40% (i.e. Grade D and above) of the full marks in each of the theoretical subjects and 50% (i.e. Grade C and above) 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.  Pass marks 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 below in U.Reg. 12 (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.
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 examinations for the unsuccessful candidates of the running 4th year batch. 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/or eighth semester special back paper examination(s) fail to clear the back (un-cleared) papers, they will appear only in the corresponding seventh semester and/or eighth semester regular examination paper(s) in the next academic year, if otherwise eligible.  There shall not be any special back paper examinations from first to sixth semester examinations for unsuccessful candidates.  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. 12 (Engg) Maximum duration	A candidate has to secure Pass Marks in all the papers of the First to Eighth Semester within eight years (seven years for lateral entry candidates) 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. Reg.13 (Engg) Continuous Assessment	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 back paper examination of the concerned subject code.

U. Reg.14 (Engg) Degree award	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 a particular branch.  In addition, a candidate must complete the Mandatory Additional Requirement(MAR) as given below in U.Reg. 18B (Engg).
U. Reg.15 (Engg) Question paper- settings and Issue of Marksheets	<ul> <li>(i) At the end of semester, University Examination will be of 3 hours duration for 70 full marks.</li> <li>(ii) Question papers should be in typed format and the figures/ diagrams should be prepared through convenient figure/ diagram/ circuit making software. Number of questions in the question paper will be more than or equal to 1.5 times or less than or equal to 2 times of the questions are to be attempted.</li> <li>(iii) For every examination, separate Marksheet indicating the candidate's performance will be issued indicating academic session and date of publication of result. The remarks column should include 'P' for pass or 'XP' for eligibility with back papers.</li> <li>(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.</li> </ul>
U. Reg.16 (Engg) Grading System	<ul> <li>SGPA and CGPA         <ul> <li>a) L-T-P: Indicates Lecture Periods, Tutorial Periods and Practical periods.</li> <li>b) Credits: Weightage of a subject depending on its weekly lectures / practical hours and expressed in terms of Credits.</li> <li>c) A Semester Grade Point Average (SGPA) will be computed for each semester.</li> </ul> </li> <li>The SGPA will be calculated as follows:</li> </ul>
	where 'n' is the number of subjects registered and cleared for the semester, 'e <sub>i</sub> ' is the number of Credits allotted to a particular subject, and 'g <sub>i</sub> ' is the grade points carried by the letter corresponding to the grade awarded to the student for the subject. SGPA will be rounded off to the second place of decimal and recorded as such. The SGPA would indicate the performance of the student in the semester to which it refers.  d) Starting from the second semester at the end of each semester S, a Cumulative Grade Point Average (CGPA) will be computed for every student as follows: $CGPA = \frac{\sum_{i=1}^{m} c_i g_i}{\sum_{i=1}^{m} c_i}$
	Where 'm' is the total number of subjects the student has registered and cleared from the first semester onwards up to and including the semester S, 'c,' is the number of Credits allotted to a particular subject 's,' and 'g,' is the grade-point carried by the letter corresponding to the grade awarded to the student for the subject 's,'. CGPA will be rounded off to the second place of decimal and recorded as such.  The CGPA would indicate the cumulative performance of the student from the first semester up to the end of the semester to which it refers. The CGPA, SGPA and the grades obtained in all the subjects in a semester will be communicated to every student at the end of every semester. For determining the inter se merit

every student at the end of every semester. For determining the inter se merit ranking of a group of students, only the rounded off values of the CGPAs will be

The calculation of SGPA and CGPA will be based on all the subjects registered

used.

	corresponding subjects percentage of marks ob Where EX (Excellent) O (Out A (Ver B (Goo C (Fair D (Ave	along with reflection of c tained.	CX, O, A, B, C, D and F for each corresponding SGPA, CGPA and
U. Reg.17 (Engg) Award of degree	be done on the basis of The conversion from C	the 'Cumulative Grade Po	ill be given by the formula which
U. Reg.18 (Engg) Class of degree and honours	% = CGPA * (10 - 0.75) A candidate who has cleared all the subjects of all the eight Semesters of Coof Study will be awarded with the following degrees and honours. (i) First Class with Honours: Provided he/she has secured a CGPA of 8.0 above, having cleared all the examinations in a single attempt and comp an additional 20 credits. These could be acquired through Massive Online Courses (MOOCs). However, if a candidate misses or fails to ap in a regular examination owing to medical ground only once during the eduration of the course and clears the paper in the very next attempt, he will also be conferred with the Honours degree if he/she secures 8.0 or a CGPA and completes an additional 20 credits through Massive Open On Courses (MOOCs).		all the eight Semesters of Course ees and honours, has secured a CGPA of 8.0 and in a single attempt and completes acquired through Massive Open indidate misses or fails to appear round only once during the entire in the very next attempt, he/she see if he/she secures 8.0 or above
	eligible for Honour (iii) Second Class: Pro than 6.5. (iv) Pass Class: Provid	rs degree.  evided he/she has secured  ed he/she has secured a C	GPA of 6.5 or above and is not a CGPA of 5 or above but less GPA of 4 but less than 5.
U. Reg.18 A (Engg) Massive Open Online Courses (MOOCs)	Massive (Engg.), if he/she completes an additional 20 credits through MOOCs (of not covered in the regular curriculum) during the entire 4 years of regular		edits through MOOCs (on topics of entire 4 years of regular course amination. MOOCs providing a Candidates shall submit their a 'Verification-cum-Assessment' Examinations. from standard course providers a, edX etc. offered by reputed After completing any MOOC, ations may be directly transferred A duration based credit mapping
	Duration (hours) 6-10 11-20 21-30	Duration (weeks) 1-2 3-4 5-6	Credit Points 1 2 3
	31-40 41-50 51-60	7-8 9-10 11-12	5 6

	The MooCs with duration given in hours will consider the Hours to Credit Point mapping, whereas MOOCs with duration given in weeks will consider the Weeks to Credit Point mapping as per the above given table. Any MOOC where both hours and weeks are given, the credit point mapped in a higher side shall be considered.		
U. Reg.18 B (Engg) Mandatory Additional Requirement (MAR)	Completing at least one MOOC (Massive Open Online Course) or one conference-paper/ poster presentation or one journal-paper publication or organizing/ participating in co-curricular and extra-curricular activities may be done by under graduate engineering students as MAR during a 4 year engineering course, apart from the present '21-day induction/orientation program at the first-year level'.  These co-curricular and extra-curricular activities may include implementation of innovative projects (other than course curriculum), organizing/ participating in Technical Events/ Debute/ Group Discussion/ Quiz, writing articles or editing magazines, participating in sports/ games of Institute / University/ District/ State/ National levels, participating in cultural activities such as dance, drama, elocution, music etc., activities in eine clubs/photography club, participating in yoga camps/ adventure sports community services, membership in professional bodies/ student chapter etc.		
U. Reg.19 (Engg) Year of passing of final Examination	<ol> <li>The CGPA results of 8 Semester Examination of those candidates who has not qualified their previous semester examinations, will be published as "SNC" i.e. Semester(s) Not Cleared and their CGPA marksheets will not be issued.</li> <li>If a candidate after qualifying his/her final (8th) semester examination, clears his/her not-qualified Semester(s) Examinations(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 all his/her back log examinations and his/her CGPA marksheet will be issued accordingly.</li> </ol>		
U. Reg.20 (Engg) Post-Publication Scrutiny of answer scripts	<ol> <li>Post publication scrutiny does not imply re-examination or re-assessmen scripts but involves verification of scripts and records to ascertain</li> </ol>		
U. Reg.21 (Engg)	In case, a student scores 36 and above but less than 40, a grace of maximum 4 marks shall be added for attaining the pass marks. However, this facility shall be provided for a maximum of two subjects (preference should be given to departmental subjects and sorted out alphabetically) only for a student.		
U. Reg 22 (Engg)	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 these regulations, the decision of the Executive Council, BU in this regard shall be deemed final arbinding.		

# Rules Related to Examination of

U.Exam.Rule	r Year B.E. (Bachelor of Engineering) Courses of Studies
I (Engg) Process of awarding marks in continuous assessment	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.
process	30 marks of continuous assessment are allotted as follows:
	<ol> <li>One Midterm examination and one internal assessment (optional) of 15 marks each (Best of two will be considered) to be conducted by the departments under responsibility of the head/in-charges.</li> <li>Attendance of 10 marks (Attendance marks will be given considering the percentage of attendance in Lecture and Tutorial Classes).</li> <li>Assignments(Paperwork/Seminar/Presentation etc.) of 5 marks.</li> </ol>
awarding marks in practical/ sessional	(i) In case of practical papers, the 100 full marks to be distributed as follows normally: Internal Marks: 60 (Continuous evaluation:30, lab report/note book:20, attendance: 10) Final examination Marks:40 If any candidate fails to attend the practical examinations, he'she will be declared to be failed and will not a shore.
examinations (	declared to be failed and will get a chance to appear in the Final examination of the corresponding practical examinations in the next year as the Back Paper candidate.
	(ii) In case of project (which is a sessional paper), the 100 full marks to be distributed as follows normally:  Marks (Supervisor): 60  Final Examination: 40
	iii) In case of Industry Internships (which is a sessional paper) the 100 full marks to be given in the final examination. This examination is to be conducted by the concerned department.  Production of an Internship completion certificate from the appropriate authority is an additional pre-requisite for appearing in the final examination for Industry Internships.  The internal marks (given in the first time) will remain same for the Back Paper candidates.
16	any candidate fails to attend the start

If any candidate fails to attend the final practical or sessional examinations (in 7th semester and 8th semester) he/she will be declared to be failed and will get a chance to appear in the 7th/8th semester special supplementary practical or sessional examinations.

Rule 3 (Engg)	Examination Procedures:
Examination	<ul> <li>(i) The recommendations of the Board of studies of Faculty of Engineering in connection with the names of the paper-setters, Moderators, Examiners &amp; Scrutinizers etc. are to be made in a prescribed format to be provided by the Engineering cell of the Controller of Examinations' Department, BU, Henceforth the Controller of Examinations, BU shall issue the appointment letters to the paper-setters, Moderators, Examiners &amp; Scrutinizers etc.</li> <li>(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 and the Head Examiner should submit the same before the Engineering Cell of the Controller of Examinations' Department.</li> <li>(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. 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(s) as to be appointed by the Controller of Examinations. BU.</li> </ul>
Rule 4 (Engg) Post publicati	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
on scrutiny	Examinations) from the date of issue of marksheets to the office of the Controller of Examinations, BU.
Rule 5 (Engg)	(i) Just after completion of the examination the Head Examiner should take
Role of Head Examiners	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 subject/ paper 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 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, BU.  (iv) Head Examiners shall submit all the marks of examinations including CA (after collecting from the concerned Subject teachers/Head/In-Charge of the department) duly signed by the examiner, head examiner and scrutinizer if any.  (v)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 scrutinize the answer scripts before sending the same to the office of the Controller of Examinations for post publication scrutiny works. Any discrepancy in this regard must be brought into the notice of the Controller of examinations.  (vi) Head examiner shall return all the answer scripts to the Controller of examinations after one year from the publication of results.
Rule 6 (Engg) Misconduct Malpractice during Examinations	An invigilator is required to be alert at every moment so that no student can adopt malpractice during examination.  (i) Nature of malpractices

Category I:

- (A) Writing erratic / irrelevant matters
- (B) Writing obscene language / sketches
- (C) Disclosing the identity in the answer script and / or requesting for specific marks.
  - (D) Writing wrong Roll No.
- (E) Leaving the examination hall without permission / not signing in the attendance sheet.

Category II:

- (A) Possessing printed / handwritten notes / Electronic devices
- (B) Copying or helping in copying
- (C) Manual / group copying
- (D) Possessing text book / sizeable handwritten / printed text
- (E) Attempting to bribing / writing letter hinting at illegal gratification
- (F) Mutilating the answer book issued

Category III:

- (A) Misbehaving / threatening examination official or other examinees / smuggling out question paper
  - (B) Receiving outside help
  - (C) Assaulting examination officials
  - (D) Indulging in / inciting anything other than normal
  - (E) Smuggling in / out answer script or attempting to do so
  - (F) Tampering with answer book issued and replacement of pages
  - (G) Impersonation or helping others to impersonate

N.B.: The Controller of Examinations shall use his discretion in respect of the steps to be taken in case any other type of malpractice not mentioned above.

(ii) Board of Discipline

There shall be a Board of Discipline to which all cases of breach of discipline in connection with examinations shall be reported with relevant documents and details.

- (iii) Highest Punishment recommended for consideration of the Board of Discipline
  - Category 1 Cancellation of Paper
  - Category II Cancellation of paper in case of (A) to (D).
     Cancellation of the entire examination of the semester in case of (E) and (F).
  - Category III Cancellation of entire semester examination with debarment from appearing in any examination for one year / two years including the current examination.
- (iv) Steps to be followed for a student who is detected while indulging in malpractice
  - The answer together with support material(s) used in the act of malpractice, if any, be ceased by the invigilator / supervisor.

 The student should be asked to fill in the unfair practice form and sign the same before the invigilator / supervisor. No verbal argument etc. shall be entered into.  A fresh answer script be issued to the student after writing on the first inside page, the time of issuance of the said answer scripts by the invigilators. No signature on the page shall be made. The student shall be allowed to continue with the examination.

 The first answer book along with the unfair practice form duly completed by the invigilators / supervisor and the offending materials ceased at the center be packed in sealed envelope and conveyed to the Controller of

Examination separately.