

# **PG REGULATIONS**

**(2008 onward)**

**Regulations For The Post-Graduate Programmes**



**BIRLA INSTITUTE OF TECHNOLOGY  
(A DEEMED UNIVERSITY)  
MESRA, RANCHI, JHARKHAND  
INDIA**

# **REGULATIONS FOR THE POST- GRADUATE PROGRAMME**

## **1. PREAMBLE:**

1.1 The regulation herein specified apply to both FULL-TIME, PART-TIME, Collaborative and Sponsored Post-Graduate Programmes, offered by the Birla Institute Of Technology, hereinafter, referred to as the Institute. Department, Centre, Collaborative Institute, wherever mentioned refers to a Department / Extension Centre of Institute/Collaborating Institute with whom MOU/ Agreement has been signed by the Institute. The Extension center(s), Collaborating Institute may be located anywhere in India or outside the Country.

1.2 At present, the Institute is offering the following Post Graduate Programmes: M.E., M.Pharm., M.Tech., M.C.A., M.Sc. and M.B.A.

1.3 These programmes are correlated courses of study, the successful completion of which enable the participants of the programmes to qualify for the award of a Post-Graduate Certificate/ a Post-Graduate Diploma/ a Master's Degree in the appropriate branch depending on the academic achievement of the participants. In the case of Collaborative Exchange Programme, if any, the participant may qualify for the award of appropriate Degrees of both the Institute, if so agreed upon by the Institute.

1.4 A participant of the programme is a student who registered himself/herself with the Institute for a course of study and attends the same.

1.5 Full-time programmes are those programmes where the participants devote their entire available time for the studies and research work as per schedule and are not employed, except in the case of sponsored candidates.

1.6 Part-time programmes are those programmes where the participants are employed and where they devote only Part of time for the Post- graduate studies.

1.7 Collaborative programmes/ collaborative Exchange programmes are those programmes where the participants pursue any programme of studies, approved by the Technical Council/ Board of Governor of the Institute either fully or partly in other Indian/Foreign Institute with whom an appropriate MOU/ similar agreement have been signed by the Institute. The Collaborating Institute where the participant(s) pursue partly/fully any programme of studies, will be known as the Host Institute(s).

1.8 Sponsored Programmes are those Programmes which are specific Postgraduate Programmes tailored to the needs of the Sponsoring Agency for a certain defined period and group of participants.

## **2. TIME SCALE FOR ACADEMIC ACTIVITY**

2.1 The basic units for academic activity for the Post-Graduate Programme shall be a semester which would normally be of 16 weeks duration. There shall be two normal semesters in an academic year. A basic contact period is one in which a teacher engages the students for a minimum duration of 45/50 minutes, depending on season of the year. However, MBA programme will run on trimester basis. The duration of trimester would normally be of 10 weeks.

2.2 All academic activities such as date of registration, commencement of classes, last date of classes, date of quizzes and end semester examination schedule shall be announced by the Institute prior to the commencement of semester/ trimester programme.

### **3. SHORT SEMESTER OR SUMMER PROGRAMME**

3.1 The Institute may schedule a short Semester Programme of 4 weeks duration during long vacations after completion of running regular semester(s) programme once in an academic calendar. There will be no formal classes under this Programme. The Quizzes and the End-Semester Examinations will be conducted by the Department and the Examination Department respectively. The academic loading of the Short Semester Programme shall be restricted as laid down in Clause 25.5 of these Regulations. In short semester the students shall be eligible to register only those courses which he/she has under taken in the regular semester and could not secure qualifying grade.

3.2 A student with shortage of attendance ( F\* ) in a subject is not eligible to register for Summer Programme in that subject.

### **4. OFFERING OF COURSES OF STUDY**

4.1 The institute shall offer courses of study during a semester from consideration of minimum enrollment and facilities available. The institute shall have the right to cancel or skip offering any or all the courses of study if the above requirements are not satisfied.

### **5. ELIGIBILITY FOR PARTICIPATION IN THE POST-GRADUATE PROGRAMMES**

5.1 The minimum qualifications which the student should possess for participation in the Post-Graduate Programmes shall be as laid down by the Institute keeping in view the recommendations of appropriate statutory authority /agency like UGC, AICTE, etc.

### **6. REGISTRATION FOR COURSES OF STUDY**

6.1 Every participant of the Post-Graduate Programme shall first register himself/herself for the courses of study he/she intends pursuing, provided that he/she possesses the minimum qualifications as laid down by the Institute and his/her plan is approved by the adviser as provided in Clause 7 and consistent with the academic loading as stipulated in Clauses 26, hereinafter.

6.2 Participant of the Post-Graduate Programme shall be permitted to make change in his/her registration for the courses of study in a semester, if he/she so desires, subject to the approval by the Adviser, within **15 days** of the commencement of the Semester/ Trimester. However, the participant (s) should desist pursuing more than one programme either of this Institute or of any other institute at a time except in case as permitted under Clause 31 on Collaborative Programme.

6.3 In all these cases, the academic loading shall be in CONFORMITY with Clause 25, specified, hereinafter.

6.4 Fees payable by the participants including fees payable for examination shall be as laid down in the Administrative Instructions issued from time to time by the Institute for this purpose. Fees payable for Collaborative/Collaborating Exchange Programme will be decided by the host Institution in consultation with the Institute.

## **7. ORIENTATION OF PROGRAMME**

7.1 The Post-Graduate Programmes detailed in these Regulation aim to provide the participants with a courses of studies based on individual needs and flexible curriculum requirements. However, to ensure that the chosen plan of studies is a correlated Post-Graduate Programme, it shall be subject to scrutiny and approval of the concerned Head of the Department or his nominee, who will be designated as Advisor.

7.2 However, in collaborative programmes the advisor (s) would be the Head of the Collaborating Institute or his nominee (if the programme is pursued at the Collaborative Institute).

## **8. AUDITING OF COURSES**

8.1 All the courses offered in the Post-Graduate Programme will be open for audit in the spirit of an opportunity for continuing education for the participants who wish to refresh or update their knowledge. Audited courses shall not count for academic credit, nor shall there be any examination requirements. Those with minimum qualification of a Bachelor's Degree or equivalent in any subject shall be eligible to enroll for audit course.

## **9. MEASURE OF ACADEMIC ACHIEVEMENT**

9.1 The academic achievement of the participating students in the Post-Graduate Programme shall be measured in terms of units or credits earned and grades obtained. Norms for the evaluation of credit shall be as specified hereinafter under the appropriate academic activity. The overall performance of the student in a semester/ trimester examination shall be measured in terms of grade point average as specified later.

## **10. SCHEME OF INSTRUCTION**

10.1 The scheme of instruction in Post-Graduate Programme shall be of the following forms of academic activity:

- a) Theory
- b) Sessionals
- c) Thesis
- d) Directed Studies
- e) Seminar.

## **11. THEORY**

11.1 A theory type of academic activity shall involve concepts, fundamental ideas, and techniques, as laid down in text books or literature and which can be grasped through lectures and assignments.

11.2 A theory type of course with about 45 contact periods in a semester and 30 contact period in trimester shall enable participating student to earn one unit of academic credit provided that he/ she fulfils the attendance, and grade requirements as specified hereinafter.

## **12. SESSIONALS**

12.1 The following type of academic work will be covered in sessional:

- a) Laboratory Experiment
- b) Design Exercise
- c) Project
- d) Term paper or any other academic work, the purpose of which would be to train the student by practice, repeated use and hands on experience.

12.2 A sessionals course of 4 contact periods a week and about 40/ 50 contact period during a semester shall enable a participating student to earn half a unit to one unit of academic credit provided that he/she fulfils the attendance and grade requirements as specified hereinafter.

### **13. THESIS**

13.1 A thesis is essentially the student's P.G. Research work on any selected topic, which may be undertaken under the guidance of a member of the teaching staff of the Institute. In case the thesis work is being carried out at an organization approved by the Institute, there shall be an Internal guide from the Institute and an external guide from the organization where the thesis work is being carried out. In case of Collaborative Institute, there shall be a guide from the institute where thesis work is being carried out and a Co-guide from the other collaborative Institute. Before the final submission, the draft must be approved by guide(s). The student must be in constant touch with the guide(s). The thesis work may involve analytical studies/ computational work/experimental findings fabrication/ testing of hardware and their combination or any other forms as directed by the guide(s). The final submission of thesis shall be on an approved format as given in Appendix- II. However, for a Collaborative Exchange Programme, the Thesis/Project work and evaluation shall confirm to the norms/regulation of the host institute.

13.2 The academic credit for thesis shall be as specified in Clause 16 of the Regulation.

### **14. DIRECTED STUDIES**

14.1 The Department/Centre/Collaborative Institute may offer a course of Directed Studies in their Branch/Centre/Collaborative Institute. The purpose of the course is to permit the student to study a topic tailored to his/her individual requirements. Under the Directed Studies the student will study largely on his/her own under the guidance of a faculty member of the concerned Department/Centre/ Collaborative Institute. No formal lectures will be delivered. The syllabus of the course and mode of examinations must be approved by the Technical Council of the Institute.

14.2 Only one unit of academic credit through out the programme will be allowed in this category.

### **15. EXAMINATION AND ASSESSMENT**

15.1 Each Theory course shall be evaluated for maximum of 100 marks per unit though progressive internal assessment in the form of Quizes, Assignment and End-Semester examinations. The weightage of Quizes & Assignment and End-Semester marks shall be 30%, 10% and 60% respectively.

15.2 There shall be 3 written Quizzes at specified intervals, each shall be of 40 minutes duration. The progressive internal assessment shall be based on best two out of three Quizes. The End-Semester questions in theory papers shall have enough choice for the candidates. The duration of examination for the theory courses shall be three hours and shall carry 60 marks. The procedure and assessment of assignment is given in Appendix- III.

15.3 Each Sessional unit will be evaluated for either 50 or 100 marks depending on 0.5 unit or 1 unit assigned to it. From this, 60% marks will be allocated for Progressive

internal assessment during the conduct of course through written Quizzes (20%)/Experiments (20%) and viva-voce (20%) at specified interval of time. The remaining 40% will be allotted for End-Semester Examination, which will include practical experiments/viva-voce etc.

15.4 If a student does not appear in end Semester in Theory/ Sessional, he/ she will be given maximum of grade 'C'.

15.5 On satisfactory completion of the prescribed component of the course, students will normally proceed to thesis, which will start at the beginning of III semester and will continue in the IV semester. This should be a substantial piece of research work, which both reinforces the skills learned in the prescribed component of the course and provides a genuine opportunity to undertake valuable research. Each student is required to present his/her progress of thesis work time to time (to be decided by the department).

- Each student is required to submit a synopsis of his/her research under the guidance of a supervisor, approved by the department. The subject of thesis will be related to his/her field of study which may be conceptual, analytical or related to application, planning and development, and will be approved by the department.
- The thesis evaluation during III semester (**Full time**) and IV semester (**Part time**) (for 3.00 units) will entirely be assessed internally by the departmental committee consisting of head and two senior faculty members of the department along with the guide and one professor of other department of the Institute/ external subject expert. The evaluation basis will be as per the guidelines mentioned below,
  - i) Synopsis consisting of relevance of the problem to be studied, its aim and objectives, methodology adopted to study such problem.
  - ii) Review of literature
  - iii) Preliminary base work carried out.
  - iv) Presentation.

During IV semester (**Full time**) and V & VI semester (**Part time**), the candidate will proceed further with his research work (for 5.0 units) and will submit the final thesis after approval from the concerned department. The progress during the IV semester should be judged from time to time by the department committee constituted by the head of the concerned department. The final evaluation of the thesis shall be done by a board consisting of:

- a) The Guide (s) for the Thesis.
- b) An External Examiner appointed by the Examination Committee on the basis of panel provided by Head of Department / the Head of the Host/ Collaborating Institute in consultation with the Guide.
- c) Head of the concerned Department /Centre/Head of Host/Collaborative Institute or his/her nominee.

However, in Collaborative Exchange Programme, the thesis examination shall conform to the norms/regulation of the Host Institute. **The result for the III & IV semester for the full time students and IV, V & VI semester for the part time students would be declared after completion of requisite number of academic credits allotted for the thesis (8 unit).**

**d) PG Short Semester Examination Assessment.**

**(i) PG Short Semester- Three quizzes of 20 marks each would be conducted at specified interval and best two would be considered and the End Semester Semester Examination would carry 60 marks w.e.f 2006 batch.**

15.6 Thesis submission will be carried out twice a year, that is, in the month of November & May every Year. Thesis through respective Head of the Department / Centre/ Collaborative Institute forwarded by Dean (P.G.) shall be submitted in accordance with the notified academic calendar of the semester.

**16. CREDIT FOR THEIS/PROJECT WORK**

16.1 The thesis evaluation will be carried out as per credit specified by the Department/ Centre/ Collaborative Institute which shall not in any case exceed 8 units for M.E./M. Pharm./ and M.Tech./ other Postgraduate Degree Programmes.

**17. AWARDING GRADES**

17.1 Based on the result of the examination, the performance of the students shall be graded on the 10-point scale as under:

<b>Grade</b>	<b>Grade Point</b>	<b>Percentage of Marks obtained</b>
Ex	10	90% and above
A+	09	80% to 89%
A	08	70% to 79%
B+	07	60% to 69%
B	06	50% to 59%
C	05	40% to 49%
D	04	20% to 39%
F	00	Less than 20%

**18. ACADEMIC CREDIT**

18.1 To earn academic credit in a subject, a student should get a grading of 'B' or above.

**19. PRE-REQUISITE**

19.1 Where a prerequisite is specified for a course, the grading of 'C' shall be deemed as satisfying the prerequisite requirement, although such a grading shall not enable the student to earn academic credit in the subject.

**20. RECORD OF ACADEMIC POGRESS**

20.1 The academic progress of the students shall be maintained in a Grade Card/ Transcript, wherein the grades awarded, grade point and the G.P.A. earned by the student in the examination shall be entered.

20.2 On completion of the academic requirements as prescribed by Regulation, the successful students shall be awarded cumulative grade point average (CGPA), class/division and aggregate % of marks as under:

$$\text{C.G.P.A} = \frac{\text{Total points earned in required no. of units}}{\text{Total unit required to complete the Programme}}$$

i) First class with Distn. = C.G.P.A of 8.00 or more

ii) First Class = C.G.P.A. of 7.00 or more

iii) Second Class = C.G.P.A. of 6.00 to 6.99

iv) Aggregate% of marks = C.G.P.A. x 10

## 21. PROBATION

21.1 A student getting a grade point average below 5.50 in a semester examination shall be placed on probation and the academic loading shall be provided in Clause 22. The G.P.A. is calculated as under:

$$\text{G.P.A} = \frac{\text{Total No. of grade point earned in a semester Exam.}}{\text{Total No. of unit registered in the semester}}$$

## 22. ACADEMIC LOADING DURING PROBATION

22.1 If a student gets a G.P.A. below 5.5 in a semester/trimester examination, he/she be placed on probation and allowed to register for the courses offered in the next semester/trimester. The academic loading of the student on probation shall not exceed:

- a) For Full-Time programme 5.0 units.
- b) For Part-Time programme 3.0 units.

22.2 If a student is placed on PROBATION because of his/her performance in the first semester and does not get a grade point average equal to or greater than 5.5 in the next semester examination he/she shall be dropped from the programme.

22.3 If a student is placed on PROBATION because of his/her performance in the first or second trimester and does not get a grade point average equal to or greater than 5.5 in the next trimester examination he/she shall be dropped from the programme.

## 23. FACILITIES FOR FAILED STUDENT

23.1 **DIRECTED STUDIES** : If a student fails in a course and if for any reason, the Institute is not offering the course in the subsequent semester and if this abnormally delays his/her degree the student may be permitted by the Institute to register for a course of **DIRECTED STUDIES** as in clause 14 of the Registration, only once during his/her postgraduate Degree Programme. The progressive internal assessment and mode of examination will be the same as in any theory unit. Only one course in the entire degree programme shall be allowed in this category. A student who has already taken **DIRECTED STUDIES** earlier under Clause 14 is, however, is not allowed to avail this facility.



## 23.2 PROVISION FOR SPECIAL SEMESTER

If a Postgraduate student is left with maximum of 3.0 units back log including subjects in which he/she was awarded F\*/ un-registered / registered subjects, if any, which may cause him/her a delay in completing the degree programme or acquiring the eligibility to appear in a special examination the institute may arrange classes for such courses during the long vacations of the institute normally during the months of June/July. The classes held during the long vacations will constitute a Special Semester which will be governed by the rules and regulations of any normal semester. The student, who will be registering for this Special Semester, would not be eligible to register in the concurrent Summer Programme

## 24. AWARD OF POST-GRADUATE CERTIFICATE/ DIPLOMA/ DEGREE

24.1 A student who has successfully completed the specific Post-Graduate Programme and has passed the stipulated End-Semester examination(s) and has secured requisite number of academic credits, may be awarded Post-Graduate Certificate/Diploma/Master's Degree as specified hereunder:

- a) **POST-GRADUATE CERTIFICATE** The minimum requirement for a Post-Graduate Certificate shall be 6 units of academic credit in M.E./M.Pharm/M.Tech programme and 10 units in other Post-Graduate degree programmes and 14 units for Management Programme. The requirements in these respects shall be specified under courses of study.
- b) **POST-GRADUATE DIPLOMA** The minimum requirement for a Post-Graduate Diploma shall be 12 units of which a minimum of 5 units shall be from the discipline of the courses undertaken for M.E/M.Pharm./M.Tech. programmes, and 28 units for Management Programme. For the MCA/ M.Sc. Programmes, the Post-Graduate Diploma in appropriate discipline shall be awarded on completion of 18/16 units respectively. The Post-Graduate Diploma with specialization other than MBA may be awarded, if 4 units credit has been earned by the student in the area of specialization in a discipline.
- c) **DEGREE IN M.E./M.PHARM./M.TECH./M.SC./MBA/MCA (FT/PT)** Master's Degree in the appropriate branch may be awarded to the student if he/she has earned a minimum of
  - a) 20 academic credit in ME/M.Pharm/M.Tech.(FT/PT),
  - b) 42 academic credit in MBA (FT/PT).
  - c) 30 academic credit in case of MCA (FT/PT)
  - d) 24 academic credit in case of M.Sc. courses, (FT/PT)

For the Post-Graduate Degree with specialization in a discipline, a minimum of 14 units of credit shall be earned by the student in his/her area of specialization inclusive of credits earned on thesis, if any. For the discipline of the Management, however, the minimum credit requirement for the same shall be 6 units for sectorial specialization. Thesis, however, shall be in the area of specialization.

**However, if a student discontinues the programme for any reason and desires a post graduate certificate/ diploma after earning the requisite number of academic credit, he/she must apply for the same within 2 years of declaration of his/her result of the last semester. No such claim will be entertained after the expiry of the stipulated period.**

## 25. ACADEMIC LOADING

25.1 A student of full-time post-graduate programme except MBA shall normally register for minimum of 5.0 units and a maximum of 6.0 units in a semester. For Master of Business Administration programme, the minimum and maximum units registration shall be 5 and 7 respectively per trimester. **Academic loading for M.E. / M.Pharm. / M.Tech. (Part time) programmes shall be as follows:**

**I, II & III Semester: 4 units each.**

**IV, V & VI Semester: 3, 2 and 3 units respectively.**

25.2 A student of part-time Post-Graduate Programme shall normally register for a maximum of 4 units **and a minimum of 2 units** for M.E./M.Pharm/M.Tech. and other Post-Graduate Programmes, except M.B.A. Programme. In M.B.A. (PT), a student is permitted to register **for a maximum of 4 units** in first three trimesters and 5 units in subsequent trimesters, **with a minimum academic loading of 3 units.**

25.3 However, in programmes where the restriction of maximum registration leaves no scope to clear a backlog unit to complete the programme in the stipulated time period he/she shall be permitted to register one additional unit in a semester/trimester to clear the backlogs.

25.4 The academic loading of student on 'PROBATION' shall be governed by clause 22 above.

25.5 The academic loading of a student in a SHORT SEMESTER shall be as laid down by the Head of the concerned Department (s)/ Centre/Collaborative Institute in consultant with Dean, P.G. Studies. However, the maximum academic loading for FT/PT students other than MBA shall not exceeds 3/2 units respectively, for MBA Programme the maximum loading shall be 4/3 units for these FT/PT students respectively from the registered units of the student in which he/she has earned less than 'B' Grade and is not short of attendance in the regular semester/ trimester in the subject(s).

## **26. MAXIMUM DURATION FOR COMPLETION OF PROGRAMMES**

26.1 The maximum duration for the completion of the various programmes shall be as under:

<b>Programme</b>	<b>Normal time</b>	<b><u>F.T.</u></b>		<b><u>P.T.</u></b>	
		<b>Normal time</b>	<b>Maximum time</b>	<b>Normal time</b>	<b>Maximum time</b>
1. M.E/M.Pharm/M.Tech.	4 Semesters	4 Years	6 Semesters	6 Years	
2. M.B.A.	6 Trimesters	4 Years	9 Trimesters	6 Years	
3. M. Sc.	4 Semesters	4 Years	6 Semesters	6 Years	
4. M.C.A.	6 Semesters	6 Years	9 Trimesters	9 Years	

## **27. TEMPORARY WITHDRAWAL FROM THE SEMESTER PROGRAMME**

27.1 If the Institute is satisfied with the bonafides of the reason(s), temporary withdrawal from the semester/ trimester programme may be permitted. The period of temporary withdrawal shall not be counted in the maximum time limit of a Post Graduate (Full-time/Part-time) programme. However, prior approval for such withdrawal should be obtained from the Vice Chancellor for continuing in the programme later. Normally a student will be permitted to discontinue temporarily from the programme only for consecutive two semesters/ trimesters or for a maximum of three semesters/ trimester during the entire span of the programme.

## **28. INDUCTION OF STUDENTS FROM OTHER INSTITUTIONS**

28.1 In the event, the Post-Graduate student from other Institutions wish to be admitted into the Institute's programmes, they shall, in the first instance, submit their syllabi of course undergone and the marks and grades obtained in these courses. These shall be evaluated by the competent Authority of the Institute who will decide the credits to be given to the applicant. On the basis of the recommendation made by the competent authority, the institute may admit the applicant to the Post-Graduate programme of the Institute.

28.2 However, such students shall earn a minimum of 50% of the total units required to qualify for the Postgraduate Degree of the Institute. In case of collaborative programme as laid down in Clause 31 of the Regulation, the participant shall earn a minimum of 8 units at this Institute or as approved by the Technical council.

28.3 Notwithstanding the provision in the Clause of the Regulation, a Post Graduate certificate/Post Graduate Diploma holder may be eligible to take fresh admission in his/her chosen area in the Post Graduate Degree Programme and may be entitled to credits his/her Certificate/Diploma as recommended by the Equivalence Committee of the Institute.

## **29. FELLOWSHIP/SCHOLARSHIP**

29.1 In case where the participants of Post-Graduate Programme are eligible for the award of Fellowship/Scholarship, such cases shall be governed by separate Administrative Instruction which shall be issued by the Institute from time to time.

### **30. ATTENDANCE REQUIREMENTS**

30.1 All Post-Graduate students must fulfill a minimum attendance requirement of 75%. In each course a minimum attendance of 75 percent is required. Those who do not fulfill the requirement in any course shall be automatically awarded F\* grade for the course. Any further step or action to be taken will be decided after examining the reasons for the absence.

### **31. COLLABORATIVE PROGRAMME**

31.1 The Institute may scheduled/ approve collaborative Academic Programme(s) with Indian/Foreign Universities/Institution for Degree(s)/Double Degree(s) of participant or any other programme as deemed to be appropriate by the Institute from time to time. Under this programme, the participant will pursue any programme of study, partly/fully in the collaborative Institute, or as approved by the Technical Council.

### **32. FULL-TIME/ PART-TIME CONVERSION**

32.1 A student of a Full-time programme shall normally not be permitted to switch over to a Part-time programme and vice versa. However, a participant of PT/FT Programme may register for the course(s) of the FT/PT, if not offered by his/her programme(s).

### **33. CHANGE OF CENTRE/PLACE OF STUDIES**

33.1 The Centre or place of studies shall normally remain unchanged for both Full-time/ Part-time Programme, except in the case of thesis / project work which may be permissible to be carried out in other Organization(s)/Institute(s) under Clause 13 of the Regulation.

### **34. SPONSORED PROGRAMME**

34.1 The Technical Council may restructure the sponsored programme(s), if any, and shall revise the course contents as deemed to be appropriate from time to time. Normally, such revision should be carried out within 2 years of the commencement of any such programme.

### **35. DISCIPLINE**

35.1 Students are expected to observe discipline behavior/manners inside the Institute/ Centre so as to enhance the image of the Institute/ Centre. Any act which may be considered derogatory shall not be acceptable.

35.2 Notwithstanding the Clause of the Regulation, the Institute may terminate the admission of participant(s) to the Post Graduate Programme, if it is so satisfied.

## APPENDIX – I

### *Rules Regarding Admission of Sponsored Candidates to Postgraduate Courses*

1. The Institute may admit persons, who are in gainful employment as ‘Sponsored Students’ to any of the courses covered by this regulation subject to the conditions laid down in following paragraphs.
2. An applicant seeking admission as a sponsored candidate must have obtained at the qualifying degree examination.
  - i. At least 55% marks or equivalent CGPA in the case of Bachelor’s degree examination in Engineering, Technology, Pharmaceutical Science, Architecture and Master’s degree examination in Sciences/ Arts.
- 3.. Candidates who possess the minimum prescribed qualification and are in service in any of the following establishments shall be eligible for admission to the courses as sponsored students-
  - i. Defence or other ministries of the Govt. of India or any other Government Organization.
  - ii. Established Research and Development Organizations
  - iii. Autonomous Public Undertakings
  - iv. QIP Scheme of the Govt. of India
  - v. Universities and recognized technical institutions which are not covered by the QIP Scheme.
  - vi. Such Industries as may be recognized by the Dept./Centre concerned for the purpose.
4. Candidates seeking admission as sponsored students must have at least 2 years full-time services while applying and shall have to produce evidence to the effect that their services in the establishment concerned will be retained.
5. Intending candidates must submit their application on prescribed form through their employers, who will forward the same to the Institute with suitable endorsements as required, so as to reach the Institute by the stipulated date.
6. All sponsored candidates shall satisfy the purpose of their selection for the admission in interview/test/both as stipulated by the concerned Dept./Centre. These provisions are not applicable to candidates selected for admission under the scheme of QIP or Defence sponsorship programme of Government of India.

## **APPENDIX – II**

### ***Guidelines for Arrangement of Certificates and Text in Thesis***

(For M.E., M.Tech., M.Pharm., MBA, MCA, M.Sc.)

1. Cover Page (In prescribed colour and format)
2. Inside Cover Page (Identical to Cover Page)
3. Declaration Certificate of Guide(s)
4. Certificate of Approval
5. Acknowledgments
6. Abstract
7. Nomenclature (if any)
8. Contents

Main text of thesis should be typed on A4 size paper in Font Times New Roman (Size 12) with margin : Left 1.5”, Right : 1”, Top : 1”, Bottom : 1” and arranged in suitable sections like introduction, Problem Definition, Literature Review, Computational / Design/ Experimental work/Case study, Results and Discussion, Conclusion, Future Scope of Work, References, Appendix (if any). The Thesis must be hard cover bound.

PROFORMA FOR THE COVER AND INSIDE PAGE

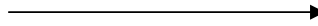
Paper : A4, Margin : Top : 1", Bottom : 1", Left 1.5", Right : 1",  
Line Spacing : 1.5 lines through out the page ,  
Text Alignment : Centre through out the page

Arial 16 Caps  
Bold



**EXPERIMENTAL INVESTIGATION OF THE EFFECT  
OF HEIGHT ON THE FLOW FIELD AROUND  
PROTRUSIONS AT SUPERSONIC SPEED**

Arial 12 Caps  
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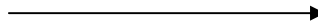


Times New Roman  
16, Bold , Italic



*A Thesis  
Submitted in partial fulfillment of the  
requirements for the award of the Degree of*

Arial 12 Caps  
2 Blank Lines

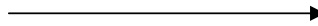


Arial 16 Caps  
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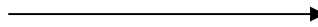


**MASTER OF ENGINEERING  
IN  
SPACE ENGINEERING AND ROCKETRY**

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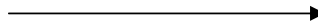


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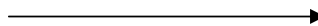
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**DEPARTMENT OF SPACE ENGINEERING & ROCKETRY  
BIRLA INSTITUTE OF TECHNOLOGY  
MESRA-835215, RANCHI**

**2008**

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Line Spacing : 1.5 lines through out the page ,  
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Arial 16 Caps Bold → **DECLARATION CERTIFICATE**

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Thesis Title  
Arial 14, Bold { This is to certify that the work presented in the thesis entitled  
" **Experimental Investigation of the Effect of Height on the Flow Field  
around Protrusions at Supersonic Speed**" in partial fulfillment of the  
requirement for the award of Degree of **Master of Engineering in Space  
Engineering and Rocketry** of Birla Institute of Technology Mesra, Ranchi  
is an authentic work carried out under my supervision and guidance.  
Arial 14 { To the best of my knowledge , the content of this thesis does not  
form a basis for the award of any previous Degree to any one else..

Date : (Guide's Name & Signature)

Arial 14 { Dept. of Space Engineering & Rocketry  
Birla Institute of Technology  
Mesra, Ranchi

Arial 14 Head  
Dept. of Space Engineering & Rocketry  
Birla Institute of Technology  
Mesra, Ranchi- 835215  
( Do not mention names)

Dean  
(Post Graduate Studies)  
Birla Institute of Technology  
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## **CERTIFICATE OF APPROVAL**

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The foregoing thesis entitled “**Experimental Investigation of the Effect of Height on the Flow Field around Protrusions at Supersonic Speed**”, is hereby approved as a creditable study of research topic and has been presented in satisfactory manner to warrant its acceptance as prerequisite to the degree for which it has been submitted.

It is understood that by this approval, the undersigned do not necessarily endorse any conclusion drawn or opinion expressed therein, but approve the thesis for the purpose for which it is submitted.

**(Internal Examiner)**

**(External Examiner)**

**(Chairman)**

**Head of the Department**

## **COLOUR SCHEME FOR COVER PAGE OF POST GRADUATE THESIS/PROJECT**

<b>M.E.</b>	-	<b>Light Blue</b>
<b>M.Tech</b>	-	<b>Light Green</b>
<b>M.Pharm.</b>	-	<b>Yellow</b>
<b>MBA</b>	-	<b>Pink</b>
<b>MCA</b>	-	<b>Peach</b>
<b>M.Sc</b>	-	<b>Black</b>

### **APPENDIX – III**

A specific assignment shall be given to each student in every theory course immediately after registration by the Course Coordinator for concerned theory paper. This may comprise new problems in emerging areas in the subject/design methodology/discussion/ analysis etc. The main objective of the assignment is to improve self learning process and exposure to current literature on the subject. The assignment should be an extension of the prescribed syllabus and in no way repetition of the class work or problems. The assignment should be submitted by the students in hand written or to the Coordinator of the course after 12<sup>th</sup> week of commencement of the semester. The date for submission will be notified in the Academic Calendar. The evaluation of the assignment will be done by a three member Committee duly constituted by HOD, for each course periodically. The Grade/marks may be awarded as per the following norms.

9 or above	Upto maximum of 20% of the total number of students
8	Upto maximum of 30% of the total number of students
7	Upto maximum of 40% of the total number of students
6	Upto maximum of 30% of the total number of students
5	Upto maximum of 20% of the total number of students
<5	Upto maximum of 10% of the total number of students