BMS INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(Autonomous Institute affiliated to VTU, Belagavi, Approved by AICTE New Delhi, Accredited by NAAC with 'A' Grade and 7 Programs accredited by NBA)
Avalahalli, Doddaballapura Main Road, Yelahanka, Postbox No: 6443
Web: https://bmsit.ac.in, e-mail: principal@bmsit.in, Ph: 080-68730444
Bengaluru – 560064

Regulations Governing for B.E, M.Tech, MCA and Research Programs

(With Effect from Academic Year - 2021-22)

NOVEMBER- 2021-22

FOUNDERS

Founder
Dharmaprakasha Rajakarya Prasaktha
Late. Sri B. M. Sreenivasaiah

Founder of BMS Educational Trust (BMSET)
Year of Establishment – 1946

Late Sri. B. S. Narayan
Former Donor Trustee

Vision and Mission of BMS Educational Trust

Vision:
"Promoting Prosperity of Mankind by Augmenting Human Resource Capital Through Quality Technical Education and Training"

Mission:
"Accomplish Excellence in the Field of Technical Education Through Education Research and Service Needs of Society"

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BMS INSTITUTE OF TECHNOLOGY AND MANAGEMENT

Vision

To emerge as one of the finest technical institutions of higher learning, to develop engineering professionals who are technically competent, ethical and environment friendly for betterment of the society

Mission

Accomplish stimulating learning environment through high quality academic instruction, innovation and industry-institute interface.

Program Outcomes

Graduates will be able to:

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

CONTENTS

Definition of the Key Words	
Academic Autonomy	: Means freedom granted by the University to the College in all the aspects of conducting its academic programs for promoting academic excellence.
Academic year	: Refers to the session of two consecutive semesters including periods of vacation
Audit course	: Means knowledge/skill enhancing courses without the benefit of a grade or credits for a course
Autonomous College	: Means a college notified as an autonomous college as per the VTU Autonomous College Statute, 2006
Branch	: Means a specialization in a BE degree program for example: Civil Engineering or Mechanical Engineering etc.
College	: Means BMS Institute of Technology and Management (BMSIT&M)
Commission	: Means University Grants Commission (UGC)
Council	: Means All India Council for Technical Education (AICTE)
Course	: Means a subject either theory or practical identified by its title and code.
Credits	: Refers to a unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit equal to one hour of lecture or two hours of laboratories/tutorials/field work per week etc.,
Credit Based System	: Refers to qualification of course work after a student completes teaching learning process followed by passing in both SEE and CIE. The requirement for awarding degree is prescribed in terms of total number of credits to be earned by the students
Course Registration	: Refers to formal registration for the course of a semester by every student under the supervision of a faculty advisor in each semester.
Course Evaluation	: Means Continuous Internal Evaluation (CIE) and semester end Examinations (SEE) to constitute the major evaluations prescribed for each course. Each of the CIE and SEE will carry 50% of the total marks to enable each course to be evaluated for 100 marks irrespective of its credits
Continuous Internal Evaluation: (CIE)	: Refers to evaluation of student achievements in the learning process. CIE shall be done by the course coordinator and includes tests, assignments, problem solving, group discussion, quiz, mini project and seminar throughout the semester, with a weightage for the different components.
First Attempt	: Refers to a student who has completed all formalities and has become eligible to attend the SEE and has attended at least one head of passing, such attempt shall be considered as first attempt.
Lateral Entry	: Means students who are admitted to the third semester of the respective programs (Undergraduate Engineering Program based on the qualification at the time of entry)
Regular Students	: Mean students who are admitted to the first year of the respective program.
Program	: In an educational program in a particular branch of engineering specialization leading to award of degree. It involves comprising of lecturers, tutorials, laboratory work, outreach activities, project work, vocational training, viva voce, internship, assignments, presentation, self-study etc.,
Statute	: Means VTU Autonomous College Statute-2006

Semester	: Refers to one of the two sessions of an academic year. Each session being of sixteen weeks duration with working days greater than or equal to ninety
Semester End Examination (SEE)	: Refers to the examination conducted by the college covering the entire Course syllabus. For this purpose syllabi would be modularized and SEE questions will be set from each module with a choice confined to the concerned module only.
University	: Means Visvesvaraya Technological University (VTU)

Nomenclature	
AI&ML	: Artificial Intelligence and Machine Learning
B.E	: Bachelor of Engineering
BS	: Basic Sciences
BOE	: Board of Examiners
BOS	Board of Studies
CBCS	: Choice Based Credit System
CGPA	: Cumulative Grade Point Average
Che	: Chemistry
CIE	: Continuous Internal Evaluation
CSE	: Computer Science and Engineering
CV	: Civil Engineering
ECE	: Electronics and Communication Engineering
EEE	: Electrical and Electronics Engineering
Engg.	: Engineering
ES	: Engineering Science
Est.	: Establishment
ETE	: Electronics and Telecommunication Engineering
HS	: Humanities and Social Sciences
ICT	: Information and Communication Technology
ISE	: Information Science and Engineering
Math	: Mathematics
MCNC	: Mandatory Courses (Non- Credit)
MCA	: Master of Computer of Applications
MD	: Machine Design
ME	: Mechanical Engineering
MSc. Engg.	: Master of Science (Research)
M.Tech	: Master of Technology
OBE	: Outcome Based Education
OE	: Open Electives
PC	: Professional Core
PE	: Professional Electives
PG	: Postgraduate Program
Ph.D	: Doctor of Philosophy
Phy	: Physics
PW	: Project Work
SEE	: Semester End Evaluation
SGPA	: Semester Grade Point Average
UG	: Undergraduate program

1. PROFILE OF THE INSTITUTION

1.1 BMS Educational Trust:

The history of BMS educational institutions can be traced back to 1946, when a noted philanthropist Dharmaprakasha, Rajakarya Prasaktha late Sri. B.M. Sreenivasaiah established the first-ever private engineering college in the country named, BMS College of Engineering (BMSCE). He had a great vision of promoting the prosperity of mankind by augmenting human resource capital through quality education and training. After his sad demise, his illustrious son Late Sri B.S. Narayan strived hard to realize the vision set through the formation of BMS Educational Trust in 1953. He was instrumental in establishing several educational institutions under the Trust. After his sad demise, his wife Dr. B.S. Ragini Narayan continued with unwavering devotion the tradition of contributing high-quality human resource to the society, the objective with which the Trust was established. She is now the Chairperson, Donor Trustee and Member Secretary of the Trust. The activities of BMS educational institutions are well guided by a Council of Trustees appointed by her. Currently, the Council of Trustees includes Dr. B.S. Ragini Narayan (Chairperson), Dr. P. Dayananda Pai (Chairman, Century Group), Sri. Aviram Sharma, (Former Senior Executive, Hewlett Packard (HP) Information Technology & Services). The Council of Trustees has high clarity of vision and commitment for its realization. It has established a conducive academic environment in all its institutions to effectively realize the vision.

Presently, the Trust runs the following 12 high quality and reputed institutions under its umbrella.

1. BMS College of Engineering (BMSCE), Bengaluru
2. BMS Institute of Technology and Management (BMSIT&M), Bengaluru
3. BMS Evening College of Engineering (BMSECE), Bengaluru
4. BMS School of Architecture (BMSSA), Bengaluru.
5. BMS College of Architecture (BMSCA), Bengaluru
6. BMS College of Law (BMSCL), Bengaluru
7. BMS Degree college for Women (BMSCW), Bengaluru
8. BMS Evening College of Arts and Commerce (BMSCE), Bengaluru
9. BMS Pre-University College for Women (BMSPUCW), Bengaluru
10. BMS Centre for Executive Education & Distance Learning (BMSCEEDL), Bengaluru
11. BMS College of Commerce and Management (BMSCCM), Bengaluru
12. BMS Training and Research Institute (BMSTRI), Bengaluru.

BMSCE, being the flagship institution of the group has contributed tens of thousands of highly competent engineers to the world. All other BMS educational institutions have followed the footsteps of BMSCE in their commitment to serve the society. The 'BMS' brand is an outcome of the exemplary vision, proactive approach, undivided commitment and dedicated effort of all its stakeholders over several decades. Together, more than 12,000 students are pursuing their higher education in Science, Engineering & Technology, Architecture, Management, Arts and Law in BMS educational institutions.

BMS Educational Trust - Council of Trustees	
Dr. B. S. Ragini Narayan (W/o Late Sri. B. S. Narayan) Educationist Chairperson, Donor Trustee and Member Secretary	
	**Dr. P. Dayananda Pai** (Chairman, Century Group) Trustee, BMSET. Chairman, BOG, BMSCE.
Sri. Aviram Sharma Trustee, BMS Educational Trust Chairman, BOG, BMS College of Commerce & Management and BMS International Co-Operation Division	
	Commissioner of Collegiate Education (Government of Karnataka) Trustee, BMSET (Ex-Officio)

1.2 About BMS Institute of Technology and Management:

BMS Institute of Technology and Management was established in 2002 to cater to the need for high-quality technical education in India that arose due to the Government of India's new economic policy. The 18-acre lush green and serene campus of BMSIT&M is located in Northern Bengaluru closer to the Kempegowda International Airport. The institute started with three undergraduate (UG) programs having a total approved intake of 180 students. Currently, there are eight UG programs, three PG programs and ten Ph.D programs catering to the educational needs of close to 4000 students. All the programs are being run as per the VTU guidelines for affiliated institutions. Now that BMSIT&M has been granted fresh autonomous status by the UGC, New Delhi and VTU Belagavi from the academic year 2021-22, the curriculum design, delivery and assessment & evaluation with respect to the batch of students getting admitted in 2021-22 will be responsibility of the institute. The Institute has 177 full-time faculty members inclusive of 19 Professors, 25 Associate Professors and 129 Assistant Professors, 91 of them have doctoral degrees from Indian Institute of Science (IISc), Indian Institute of Technology (IITs) and other reputed Universities. All these faculty members along with 116 technical and support staff members are working dedicatedly to disjoint positioning itself as a high quality engineering education provider in the country. They have been working hard to design an autonomous education system taking advantage of NEP 2020 to provide a strong foundation to all students. The curriculum developed provides all students a true outcome based education with a large scope for creativity, experimentation, self-learning, and peer learning apart from intensive classroom intervention. The high-quality faculty & staff members, excellent academic and support infrastructure, quality learning aids, productive collaborations with industry, research institutes and government have together created a highly conducive ambience for students to realize their full potential. With continuous improvement in all dimensions, BMSIT&M has become one of the preferred destinations for engineering education for students across the country and from neighboring countries too.

2. ACADEMIC REGULATIONS

The regulations listed under this head are common for all programs offered by the college, unless otherwise explicitly stated, and are based on the Guidelines for Implementation of Academic Autonomy at Colleges provided by Visvesvaraya Technological University, Belagavi. The regulations are subject to amendments made by the Academic Council with the approval of the BOG of the college from time to time and keeping the recommendations of the Boards of Studies in view. These regulations shall be called as 'Academic Regulations of BMSIT&M' and shall be effective from the academic year 2020-21.

3. PREAMBLE

Technical education, today, is faced with extremely complex challenges due to the pressing need for comprehensive, inclusive, optimal and sustainable solutions to address global and local problems. Hence, there is a need for engineering colleges to utilize the academic autonomy

granted to them in full measure to assess the gaps in the present system, review and redesign the curriculum, its delivery and evaluation processes to effectively meet all such challenges. Such an exercise should be broad based and take into consideration:

- The ever-increasing influence of science and technology on human society.
- A huge population still deprived of the access to even basic resources and infrastructure.
- The faster pace of new developments and the rapid obsolescence of prevailing practices.
- Penetration of Information and Communication Technology in all sectors of human activity and economic development.
- Service sector becoming a major avenue for the employment of technical professionals and economic gains.
- The emergence of knowledge as a key driver for the progress of nations and for enhancing their influence on the rest of the world.
- Increasing multicultural work environment and fading organizational boundaries
- Stricter regulations with respect to IPR, labour relations and environment among others, and
- Very volatile, uncertain, complex and ambiguous business environment.

A higher education institute with academic autonomy should see opportunities in these challenges. From that perspective, these institutions are responsible for producing engineering graduates who among others, will have:

- A system perspective to the problem on hand
- A strong foundation in the basics of science, technology, mathematics and engineering disciplines. The command over the chosen area of technical specialization.
- The capacity to apply the professional knowledge and skills acquired to solve complex engineering problems most optimally.
- Ability to self-learn and for life-long learning.
- The expertise in analysis, design, modeling and simulation of complex systems.
- Ability to scale up operations, to custom or mass produce, and for system operation and maintenance.
- The ability for estimation of costs and time associated with a complex project.
- The ability for rational, logical and critical thinking.
- Ability to manage the modern workforce and handle industrial relations, and
- The leadership qualities to inspire team members to achieve grand shared vision.

BMSIT&M intends to produce such graduates who strive to be complete engineers in all respects and to succeed in addressing the challenges posed by the modern world. BMSIT&M exercises the academic freedom given by the University:

- With a great sense of responsibility and accountability
- To enhance the visibility and credibility of the institute in the national and international Higher Education segment.
- To demonstrate its research prowess, creativity, innovativeness and entrepreneurial capabilitiesand
- To gain the confidence and respect of all its stakeholders, especially students, alumni, parents and the society at large.

ACADEMIC PROGRAMS:

4.1 General Information about the Academic Program:

(a) Academic Autonomy is applicable for all programs offered by the college: UG programs in Bachelor Engineering (BE), PG programs such as Master of Technology (M.Tech), M.Sc. Engg. (Research), M.C.A and the Ph.D program. The programs shall fulfill the minimum academic quality standards specified for the award of Degrees prescribed by the University, the Council and the Commission.

(b) The academic autonomy provides an opportunity to the college to make schemes of instruction, syllabi, scheme of examinations and other aspects, with approval of its Academic Council, while fulfilling the minimum academic standards of the University for the Award of Degrees.

(c) The College has the freedom to start Diploma (Post-Diploma and Post-Graduate) and/or Certificate programs with the approval of its Academic Council. The issuance of certificates/diplomas on completion of such programs shall be made under the seal of the concerned College only.

(d) The College has the freedom to evolve methods for assessing the student's performance, notifying the results, issuing the grade cards/transcripts, migration and other certificates except the Degree Certificates.

(e) To get the various benefits of academic autonomy, the college will: (i) structure its various academic programs based on the semester scheme by introducing credits for academic activities, (ii) bring-in examination reforms for better achievement (iii) award Letter grades and numerical grade points / averages for students performance and (iv) set appropriate passing standards as covered later in these regulations.

(f) Following the guidelines recommended by the University, concerning Semester scheme, Credit System, Examinations, Letter Grades and Numerical Grade Points/Averages, enables their students to avail the horizontal/ vertical mobility and transfer credits from one Autonomous College to another and related benefits of academic autonomy.

4.2 Nomenclatures of Programs:

(a) The College uses the nomenclature for their Degree programs as specified by the Commission, and the Degree Certificates issued by the University to their awardees bears the name of the College as well. This helps in maintaining the identity of each program conducted at the College and ensuring its accountability.

(b) Therefore, the nomenclatures and their abbreviations given below shall continue to be used for the Degree programs offered by the College under the University:

(i) UG Level: Bachelor of Engineering (BE)

(ii) PG Level: Master of Technology (M. Tech.) and Master of Computer Applications (MCA)

(iii) Research Level: MSc. (Engg.), Doctor of Philosophy (Ph.D)

Besides, the branch, the subject of specialization, if any, shall be indicated in brackets after the abbreviation, e.g., BE (Mechanical Engineering), M.Tech (Computer Science and Engineering).

4.3 Programs Offered:

The Under-graduate degree programs offered by the College are listed in Table 1.

Table 1: Undergraduate Programs offered by the College

Sl. No.	Program	Abbreviation	Year of Est.
1	Mechanical Engineering	ME	2002
2	Electronics and Communication Engineering	EC	2002
3	Computer Science and Engineering	CS	2002
4	Electrical and Electronics Engineering	EE	2003
5	Electronics and Telecommunication Engineering	ET	2003
6	Information Science and Engineering	IS	2010
7	Civil Engineering	CE	2013
8	Artificial Intelligence and Machine Learning	AIML	2019

The Post Graduate degree programs offered by the College are listed in Table 2.

Table 2: Post Graduate Programs offered by the College

Sl. No.	Program	Abbreviation	Year of Establishment
1	Master of Computer Applications	MCA	2003
2	M.Tech in Machine Design	MMD	2014
3	M.Tech in Computer Science and Engineering	MCS	2014

The Research programs offered by the College are:

- M.Sc. Engineering (by Research)
- Doctor of Philosophy (Ph.D.

The research centers at BMSIT&M recognized by the University are listed in Table 3.

Table 3: Research Centers Recognized by the University

Sl. No.	Program	Abbreviation
1	Mechanical Engineering	ME
2	Electronics and Communication Engineering	EC
3	Computer Science and Engineering	CS
4	Electronics and Telecommunication Engineering	ET
5	Electrical and Electronics Engineering	EE
6	Information Science and Engineering	IS
7	Master of Computer Applications	MCA
8	Mathematics	MA
9	Physics	PY
10	Chemistry	CH

4.4 Program Duration:

(a) Normal Duration: The normal duration of a fulltime academic program is the same as that followed by the University, i.e., four years for B.E., two years for M.Tech and M.C.A., three years for Ph.D. (Full time), and a time period as permitted by the University for M.Sc Engg (By Research) and Ph.D. (Part time).

(b) Prescribed Credits: As a flexible credit system is followed for coursework, it is to be noted that the program duration in the case of UG and PG shall also be dictated by the period in which a student earns the prescribed credits for the award of Degree. Hence, it is possible for an outstanding student to earn the required credits in a shorter time than that ordinarily prescribed for the relevant program in (a) above.

(c) Maximum Duration: The maximum period which a student can take to complete a fulltime academic program shall be the same as that prescribed by the University from time to time; e.g., Double the normal duration of the program, i.e., eight years for B.E., four years for M. Tech., and four years for M.C.A and double the time period normally permitted by the University for Ph.D. (regular). For PhD (part time) and M.Sc. Engg. (by research) the maximum duration is as permitted by the university.

Besides, the maximum period for a program is also dictated by the fact that a student has to demonstrate the specified minimum academic performance by registering for the prescribed minimum number of credits in every semester for continuing with the program and this period can be equal to or smaller than the maximum period indicated as above.

4.5 Admission of Students:

(a) Admissions: The admission of students to various UG, PG and research degree programs listed under Section 4.3 is governed by the Council, State Government and the University Policies/Practices in this regard. In particular, the admission of students for Research Degree programs at the College shall be made by the University by associating the College concerned in the process as per the provisions in the recent regulations of VTU.

(b) However for the admission of students to Diploma and Certificate programs shall be made by the College on its own, by following the Regulations approved by its Academic Council. In all the cases, it is necessary to follow the statutory provisions of reservation of seats to different categories of candidates from time to time.

(c) There is provision for candidates with a polytechnic diploma or any other qualification approved by the Council and the Commission to join UG Degree programs at the beginning of the second year of the 4-year program as per the prevailing practice in the University.

(d) The students can opt to migrate from one branch or specialization to another branch or specialization at the same college or another Autonomous/ Affiliated/ Constituent College under the University at the beginning of the second year. In these cases, the College follows the Rules and Regulations of the University/Council.

(e) Eligibility Criteria**:** The eligibility criteria for admission of students to UG, PG and Research Degree programs at the College shall be the same as those prescribed by the University. But, the minimum requirements for admission to PG Diploma programs shall be the post-polytechnic Diploma or equivalent qualification or the B.E. or equivalent Degree and shall not be the degree obtained from distance mode. The equivalence or its method of determination shall be as notified by the University from time to time. However, the College is free to prescribe appropriate criteria for admission to Certificate programs after receiving approval from its Academic Council.

(f) The eligibility criteria for admission of students from a non-Autonomous College to an Autonomous College, from one Autonomous College to another Autonomous College and from University scheme at an Autonomous College to its Autonomous scheme, shall be fixed by the Academic Councils of the respective Autonomous Colleges, who shall frame suitable Rules for this purpose consistent with the objectives of academic autonomy. A copy of the Rules so adopted shall be sent to the University within a fortnight of such an adoption.

(g) The eligibility criteria for the admission of students from other Universities to an Autonomous College shall be fixed by the Academic Council of the College by getting the individual cases examined by the concerned Board(s) of Studies and also by following the same criteria as in (e) above and recommend the names of such candidates qualifying for admission to the University for its approval.

4.6 Semester Scheme:

The Semester Scheme provides several benefits to technical education programs in contrast to the Annual Scheme. Therefore, the College adopts the Semester Scheme for its UG, PG and Research programs.

4.6.1 Academic Calendar: There is uniformity in the functioning of the Semester Scheme for all academic programs across the College. The academic year is divided into semesters with the duration, calendar and academic activities which will be provided to the students before the commencement of the odd semester.

4.6.2 The breakdown of an academic year for implementing the Semester Scheme is given in Table 4 as a typical example, consisting of two regular semesters and a supplementary semester in an academic year.

Table 4: Typical Schedule of Academic Year

Sl. No.	Activity	Description
1.	Number of semesters in an academic year	Two regular semesters (Odd & Even) and a Supplementary semester. As per the requirements of AICTE in its Model UG Curriculum (February 2018), a 21-days induction program will be conducted for the first year B.E. students at the beginning of their first semesters.

2.	Duration of Regular Semester	19 weeks	
3.	Duration of Supplementary Semester	07 weeks	
4.	Semester Academic activities (duration in weeks)	Regular Semester(s)	Supplementary Semester
	Course Registration	0.5	0.1
	Course Work	15.5	6.0
	Examination preparation	1.0	0.2
	Examination (SEE)	1.0	0.2
	Declaration of Results	1.0	0.5
5.	Evaluation	Continuous Internal Evaluation (CIE) and Semester End Examination (SEE), both have equal weightage in the student's performance in Theory Course/ Laboratory course and other activities.	
6.	Other Items	The total number of academic days in an academic year shall be >= 180	
		Academic schedules prescribed by the College shall be strictly adhered to by all the concerned	
		Students failing in any course(s) shall register for the same again (re-register) and shall secure CIE and SEE afresh in each course(s). This shall continue until a passing grade is obtained in the said course(s).	
7.	Supplementary Semester	Supplementary Semester is conducted for the benefit of the students to clear their failed / withdrawn / absent courses in regular semester.	

4.6.3 Academic Schedules: The calendar includes important academic activities to assist the students and the faculty. These include dates assigned for registration of courses, dropping of courses and withdrawal from courses. This enables the students to be well prepared, minimize their chances of failure in CIE and/or SEE and take full advantage of the flexibility provided by the credit system.

4.6.4 Induction program as per AICTE guidelines: As per the requirements of AICTE in its Model UG curriculum (February 2018), a 21-day induction program for the first-year B.E. students will be conducted at the beginning of their first semester.

The purpose of the Student Induction program is to help new students adjust and feel comfortable in the new environment, inculcate in them the ethos and culture of the institution, help them build bonds with other students and faculty members, and expose them to a sense of larger purpose and self-exploration. At the start of the induction, the students learn about the institutional policies, processes, practices, culture and values, and their mentor groups are formed. Its purpose is to make the students feel comfortable in

their new environment, open them up, set a healthy daily routine, create bonding in the batch as well as between faculty and students, develop awareness, sensitivity and understanding of the self, people around them and the society at large.

4.6.5 Registration of Courses: Each student registers for coursework at the beginning of the semester. The permissible course load should be either average number of credits of that Semester in the program (for the first year) or to be within the limits of minimum and maximum credits prescribed in each later Semester. A period of 2-3 days is specifically assigned for this event in the Academic Calendar for the students to seek proctor's advice, discuss with the course instructors and complete the formalities.

4.6.6 Dropping of Courses: A specific period is fixed before the commencement of CIE in that semester having covered 3-4 weeks of classes through counseling the student by the concerned proctor. The review is to mainly assist the students having a poor performance to facilitate them to drop the identified course(s) (up to the minimum credits specified for the semester) without being mentioned in the Grade Card. Such Courses are to be re-registered by these students and taken up for the study at supplementary semester in the program.

4.6.7 Withdrawal from Courses: A specific period shall be identified by the College towards the end of a semester to help review the students' performance in CIE by the proctor, followed by the students having the poor performance to withdraw from the identified course(s) (up to the minimum credits specified for the semester) with a mention in the Grade Card (Grade 'W'). Such Courses to be re-registered by these students and taken up for the study at supplementary semester in the program.

4.6.8 Audit Courses: A student can register for audit courses only to supplement his/her knowledge and/or skills. Here also, the student's grades shall have to be reflected in the Grade Card. But these shall not be taken into account in determining the student's academic performance in the semester. Because of this, it shall not be necessary for the College to issue any separate transcript covering the audit courses to the registrants at these courses. The audit course shall be considered for cases involving fulfillment of requisite credit while migrating from one scheme to another academic scheme.

5. CREDIT SYSTEM

5.1 General Information About the Credit System:

The institution follows a Choice Based Credit System (CBCS) from the academic year 2015-16 onwards. The students have an option of choosing from a wide range of electives (department and institutional) and complete the program at their own pace. Value-added courses are also offered as a part of extended learning in inter-disciplinary and multi-disciplinary domains. Thus, the CBCS facilitates continuous learning and assessment. The CBCS for the various programs provide a great opportunity for the students in their preparation to meet the challenges ahead.

The major benefits of adapting Credit System are listed below:

- Quantification and uniformity in the listing of courses for all programs at a College like core courses (hard/soft), elective courses and project work.
- Ease of allocation of courses under different heads by using their credits to meet national /international practices in technical education.
- Convenience to specify the minimum/maximum limits of course load and its average per semester in the form of credits to be earned by a student.
- Flexibility in program duration for students by enabling them to pace their course load within minimum/maximum limits based on their preparation and capabilities.
- Wider choice of courses available from any department of the same college or even from other similar colleges, either for credit or for audit.
- Improved facility for students to optimize their learning by availing the transfer of credits earned by them from one college to another.
- In the credit System, the course work of students is unitized, after a student completes the teaching-learning process as prescribed for that unit and is successful in its assessment.

Credit Definition: The credit details defined for course work in a semester (Odd/Even/Supplementary semester) is as follows:

a) Theory course conducted for one hour/week is one credit
b) Tutorials conducted for two hours/week is one credit
c) Practical or Laboratory courses conducted for two to three hours/ week is 1 credit
d) Project work based courses conducted for 4 hours/ week is one credit.

However, in the case of supplementary semester, the course load is multiplied by two. These regulations form the basis to fix semester course load and weekly contact hours in the regular/supplementary semesters.

Note: Other student activities like study tours, industrial visits, guest lectures shall not carry any credits.

5.2 Credit Structure:

A typical credit structure for coursework based on the above definition is given in Table 5. This shall be applicable for the coursework of students registered for all programs offered by the college.

Table 5: Typical Credit Structure for Course

Lectures (L) (Hours/Week)	Tutorials (T) (Hours/Week)	Laboratory Work (P) (Hours/Week)	Credits (L:T:P)	Total Credits
3	0	0	3:0:0	3
2	2	0	2:1:0	3
0	0	2	0:0:1	1
0	0	3	0:0:1	1

Thus, it is more appropriate to specify the eligibility requirements for the award of Degree (like UG, PG) based on course work by prescribing the total number of credits to be earned, as

an alternative to specifying the program duration. This will be of great help in providing the well-needed flexibility to the students in planning their academic programs and their careers.

5.3 Credits to be Earned for the Award of Degree:

The total number of credits to be earned by a student to qualify for the award of Degree from BMSIT&M is as given in Table 6.

Table 6: Total Credits to be earned for the Award of Degree

Program		Normal Duration		Total number of Credits to be Earned
		Years	Semesters	
UG Degree	B.E.	4	8	160
	B.E (Lateral entry)	3	6	120
PG Degree	M. Tech.	2	4	88
	MCA	2	4	88

5.4 Course Load in a Regular Semester:

Course Load: The ODD and EVEN semesters are known as regular semesters. The course load for a student per semester as well as its minimum and maximum limits are based on the guidelines by the University, which is based on the AICTE Model curricula for UG/PG Programs (February 2018) and the academic strength and capability of an average student.

In the first two semesters the prescribed course load per semester is fixed and is mandated as 20 credits/semester for the BE program, 24 credits/semester for the M.Tech and MCA programs. Withdrawal/dropping of courses in the first and second semester is not allowed for BE program.

In the higher semesters the average load is 22 credits/semester with the minimum and maximum limits being set at 16 and 28 credits. The choice of variation in credits depends on Cumulative Grade Point Average (CGPA). This flexibility enables students (from 3rd semester onwards) to cope-up with the course work and helps in improving their academic performance and optimizing the learning outcomes.

Contact Hours: Considering the expectations from engineering professionals with UG and PG degrees in the 21st century the number of contact hours for students is fixed up to 30 hours/week. This will help students in getting enough time and opportunity to do better preparation for the courses prescribed for credit, to take up self-study**,** to develop their creative talents. This can also enable them to get ready for challenging and exciting careers ahead. A typical example showing the calculation of contact hours based on course credits is given in Table 7.

Table 7: Typical Courses with contact hours

	Credits	Total credits	Contact Hours
Regular Course	3:0:0	3	3
Course with Tutorial	3:1:0	4	5
Course with Tutorial	2:2:0	3	4

Laboratory Course	0:0:1	1	2
Laboratory Course	0:0:1	1	3
Non-Credit Mandatory Course	2 Units	0	2

A student shall be permitted to register for additional credits (courses awarded with W Grade/ F-Grade/ I-Grade), limiting to a course load of maximum of 28 credits from third semester onwards. This is subject to the following conditions.

a) The student has secured a CGPA ≥ 7.0
b) The student doesn't have more than two backlogs from the previous semesters
c) The student shall ensure that there is no overlapping in the timetable for the period and obtain concurrence from the proctor, subject to the course being offered during the semester.
d) The student shall submit a copy of documentary evidence in respect of the above (a, b, c) while seeking approval from the concerned HOD and Dean Academics.
e) It is mandatory and responsibility of the student to ensure all the above conditions (a to d) are met for registering the additional courses over and above the prescribed credits in a semester, otherwise the registrations for the additional courses shall deem to be cancelled.

A student shall be permitted to register for additional credits (limiting to a maximum of 28 credits), from sixth semester onwards. This is to enable fast learners to take a few courses of higher semesters. This is subject to the following conditions.

a) The student has secured a CGPA ≥8.5
b) The pre-requisite (if any) for the said course is completed.
c) The student doesn't have any pending courses (courses with F-Grade/ W-Grade/Transitional Grades/Dropped Courses) from the previous semesters.
d) The student shall ensure that there is no overlapping in the timetable for the period and obtain concurrence from the proctor, subject to the desired course being offered during the semester.
e) The student shall submit a copy of documentary evidence in respect of the above (a, b, c, d) while seeking approval from the concerned HOD and Dean Academics.
f) It is mandatory and responsibility of the student to ensure all the above conditions (a to e) are met for registering additional courses over and above the prescribed credits in a semester, otherwise the registrations for the additional courses shall deem to be cancelled.

5.5 Course Load in Supplementary Semester:

The Supplementary semester is provided to help students who have failed in their regular examinations to avoid losing an academic year. The department/college may offer some courses in the supplementary semester based on the availability of resources in hand. The supplementary semester is a special semester and the student cannot demand it as a matter of right. During the supplementary semester, a student is permitted to re-register for the course(s) where he/she has secured F-Grade/ W-Grade / I-grade (new courses/courses dropped during the regular semester

are NOT allowed for registration during the Supplementary semester).

A student is permitted to re-register for a maximum of **20 credits**. All courses are not offered. A student has to opt from those offered by the department in a given Supplementary semester. The courses to be offered in the supplementary semester is the prerogative of the department and college. The student has to pay a special fee prescribed by the college to register for a course in the Supplementary semester.

5.6 The Proctor System:

The college has a well-organized proctoring system to help the students to complete their studies successfully. Each faculty advisor/proctor is assigned a group of students. The faculty advisor is called as a proctor and the student under him/her as a proctee.

(a) The functions of the Proctor are to:
- Advise the proctee on all academic matters (like registration of courses, dropping of courses and/or withdrawing from courses),
- Monitor the proctee to improve his/her academic performance,
- Identify the proctee under him/her as either a slow, average or fast learner, and help him/her to pace learning based on proctee's abilities, and
- Serve as a friend, philosopher and guide to the group of proctee's during their studentship at the college.

(b) A student is normally permitted to register for a fixed number of credits in the first two semesters. Based on the performance in the semesters and proctor may advise the student to continue in the subsequent semesters with either the course load specified for those semesters or increase the load (for average and fast learners) or decrease the load (for slow learners)subject to the permitted limits. This can be done by registering for additional courses/dropping or withdrawing some course(s) before the dates prescribed. This facility is to assist the student to pace the course work, minimize the chances of failure in the course(s) and optimize the learning process.

(c) The student's performance in the first year forms the basis for proctor's advice on the number of credits to be registered from the third semester onwards (within the minimum/maximum limits of 16 to 28 credits). Proctor's advice and close monitoring of the student's academic performance would help a slow learner to pace the course load properly, if required, and to minimize the chances of failure in the semester.

(d) The above experience should enable any student to properly plan his/her course load in each succeeding semester, by fixing it to be more than or equal 16 credits and less than or equal to 28 credits based on proctor's advice and his/her academic performance in the previous semester. Proctor's advice should also be useful to the student in identifying appropriate elective courses.

(e) This experience would help fast learners (or outstanding students) to accelerate their studies by registering for courses up to a maximum course load of 28 credits per semester in each

succeeding semesters based on their performance in the preceding and the current semesters. Such students should be able to complete the credit requirements of the engineering program in a shorter time (For eg., in 7 semesters in the case of B.E./B. Tech) and use the remaining time towards Value Added Courses or for the internship.

(f) Similarly, slow learners to register only for the minimum (equal to 16) number of credits in each succeeding semester and strive to maintain good performance in all the courses registered and complete the total requirements for the program at a slower pace, in the case of B.E as an example.

(g) The number of credits earned by a student during the semester/year and Semester Grade Point Average (SGPA) as well as the Cumulative Grade Point Averages (CGPA) shall serve as performance indices as discussed in the Regulations later.

Expected Outcome of the proctor system: The effective proctorial systems is expected to reduce the failure rate by ensuring that they learn at their pace. It motivates the students to improve the overall performance and quality of learning. It helps them to make best use of the program duration and be competent graduates at the end of the program.

Curriculum Framework

6.1 General Information About the Curricular Framework:

Curricular framework is important in setting the right direction for a Degree/ Diploma/Certificate program by the college, as it takes into account the type and quantum of knowledge necessary to be acquired by a student to qualify for a particular award in his/her chosen branch or specialization area.

Besides, this also helps in assigning the credits for each course, sequencing the courses semester-wise and finally arriving at the total number of courses to be studied and the total number of credits to be earned by a student to fulfill the requirements for the conferment. The college takes into account the AICTE Model Curricula notified from time to time and follows them to keep up with the national policy.

At the time of graduation, the minimum expected knowledge, skills and attitude in every graduating engineer for global acceptance is prescribed by the NBA, through a set of Program Outcomes (POs). The POs are primarily attained through the Course Outcomes (COs) of various courses included in the curriculum. Hence, curriculum design and development gains a lot of importance in achieving the learning outcomes of a program. Another important aspect that guides the curriculum design is the Program Specific Criteria (PSC) defined by the International lead societies (for instance, IEEE for electrical engineering) in the domain of the program. A curriculum in line with these guidelines will ensure that the graduates of the program meet the global standards.

6.2 Curricular Components:

The curriculum of an engineering program includes the following curricular components with

recommended minimum and maximum number of credits for each component.

- Humanities and Social Sciences **(HS):** English, Kannada, CPE, Environmental science, Business management, project and Finance management, Research Methodology and liberal arts
- Basic Sciences Courses (**BS**): Mathematics, Physics, Chemistry
- Engineering Sciences Courses (**ES**): Materials, Workshop, Drawing, Computers program, Elements of Civil Engineering Elements of Mechanical Engineering, Basic electronics and Basic Electrical Engineering
- Professional Core Courses (**PC**): Relevant to the chosen specialization/ branch
- Professional Electives Courses (**PE**): Relevant to the chosen specialization/ branch
- Open Electives Courses (**OE**): Courses from other departments
- Project work (**PW**)
- Seminar (**SR**)
- Internship (**IN**) and
- Non-credit Mandatory Courses (**NC**)

The curriculum includes a few elective courses offered through SWAYAM MOOCs as per the provisions of University and AICTE, as guided by the department.

6.3 B.E. Degree Program:

Curricular Framework: The Curricular framework for a B.E. Degree program includes various curricular components as listed Section 6.2 and satisfies the guidelines by the AICTE and VTU. The BE program includes courses from Basic Sciences (BS), Engineering Sciences, (ES), Professional Core (PC), Professional Elective (PE), Humanities and Social Sciences (HS), Open Electives (OE), Project work(s) (PW), Seminar (SR) and non-credit mandatory courses (NC).
B.E program also includes:

6.3.1 Induction Program: As per the requirements of AICTE in its Model UG curriculum (February 2018), a 21-days induction program will be conducted for the first-year B.E. students at the beginning of their first semester.

6.3.2 Internship: The framework also includes Internships that needs to be taken up during odd/even semester-breaks and are assessed through seminar and a report submitted during the corresponding semester.

6.3.3 Non-credit Mandatory Courses: A UG Degree program also requires a student to study two additional courses that contribute to his/her generic competencies. These courses shall not carry any credit but shall be passed for the award of the Degree. Hence, a B.E. program includes 2 non-credit mandatory courses as suggested by the BOS / Academic council. The student's performance (like Pass or No-Pass) would appear in his/her transcript. These courses are evaluated based on the performance in the CIE (and do not have the SEE component). The two non-credit mandatory courses presently included in the framework for all B.E programs at BMSIT&M are shown in Table 8.

Table 8: Sample of Non-credit Mandatory Courses for B.E. program

Sl. No.	Mandatory Courses for BE program (both regular and lateral entry students) for a maximum of two hours/week/semester
1	Design Thinking
2	Cyber Security and Intellectual Property Laws

6.3.4 Additional Mandatory Courses for lateral entry BE students: In addition to the non-credit mandatory courses for regular B.E students, the lateral entry students shall take up the following two non-credit mandatory bridge courses in Mathematics (one in 3rd semester and another in 4th semester) as listed in Table 9. The student shall pass the following non-credit mandatory/HSS courses for the award of the degree and must clear these bridge courses before advancing to the 7th semester of the program.

Table 9: Additional Mandatory Courses for lateral entry

Sl. No.	Additional Mandatory Courses for Lateral Entry Students of BE Program
1.	Diploma Mathematics – I
2.	Diploma Mathematics - II

Allocation of credits for a B.E. Degree Program: UG Engineering Degree programs in leading autonomous institutes and Universities in India and abroad carry anywhere between 160-200 credits. Keeping in view the scope and space needed to be given to students for self-learning and engage in creative and innovative activities, BMSIT&M has chosen to offer a B.E degree to an eligible candidate who have earned 160 credits as per the institution's policies. The number of contact hours in a week is expected to be lesser than or equal to 30 hours so that students will have time to expose themselves to the real world challenges, take up work hand-on, engage in collaborative and cooperative activities. These are hoped to help him/her to develop a wholesome personality to meet the 21st century challenges. Table 10 provides break up of a typical curricular framework.

Table 10: Typical Credits distribution for the B.E Program

Curricular component	Abbreviation	Typical credits
Humanities and Social Sciences	HS	13
Basic Sciences Courses	BS	22
Engineering Science Courses	ES	20
Professional Core Courses	PC	45
Professional Elective Courses	PE	12
Open Elective Courses	OE	06
Ability Enhancement Course	AEC	11
Project Work	PW	10
Internship	IN	19
Universal Human Values	UHV	02
Total		160
Non-Credit Mandatory Courses (NC)		--

The above is based on the VTU guidelines (2018), and the AICTE Model Curriculum

Sequencing of Courses for BE Degree: The above breakdown of the BE Degree curriculum shall form the basis for the proper sequencing of the coursework for the program. A suggested but typical sequencing plan for courses of a BE Degree program is given in Table 11. The provisions in the AICTE model curriculum will also be taken into consideration while finalizing the sequencing of courses.

Table 11: Typical sequencing of curricular components for the B.E program

Semesters	Curricular components
I - II	• Noncredit and Mandatory: Induction Program 21 days. • HS, BS and ES: Common for all Programs as per AICTE Model Curriculum.
III - IV	• PC: In two/three groups (like Circuit, Non-Circuit). • HS, BS and ES, Common for all Programs
V - VI	• HS, PC, PE, OE, PW, INT • Noncredit Mandatory Courses
VII - VIII	• HS, PE, PC, OE, PW, INT

6.4 PG Degree Programs:

M.Tech Programs: The College offers PG programs in Engineering leading to M.Tech degree. Typical allocation of credits for the program is given in Table 12. The credit range for each category is based on the guidelines from the University and the AICTE model curriculum (2018).

Table 12: Typical Credit distribution for the M.Tech Program

Course Category	Abbreviation	Typical Credits
Institute Core Courses	IC	02
Program Core Courses	PC	42
Program Electives	PE	16
Project Work	PW	24
Seminar	SR	02
Industrial Internship/ Field Work	IN	02
*Non-Credit Mandatory Course		--
Total		**88**

Because of the enhanced focus of M.Tech programs on Research, it is recommended that the Project work should lead to: (i) A research publication in a reputed Journal/Conference or (ii) Filing of patent (at least in India patent office), or (iii) A start-up initiative with a sustainable and viable business model accepted by an incubation center together with the formal registration of the startup.

MCA Program: The college offers the PG program in Master of Computer Applications (MCA), with credit distribution among various curricular components as given in Table 13.

Table 13: Typical Credits distribution for the M.C.A Program

Course Category	Abbreviation	Typical Credits
Core Courses	PC	39
Electives	PE	18
Project work (Mini + Major)	PW	(6+20) 26
Internship	IN	4
Mathematics	MA	4
Humanities, Ethics & Management	HEM	3
Co-curricular	CC	6
Total		100

It is recommended that the Project work of the M.C.A. program should lead to: (i) A research publication in a reputed Journal/Conference or (ii) Filing of patent (at least in India patent office), or (iii) A start-up initiative with a sustainable and viable business model accepted by an incubation center together with the formal registration of the startup.

6.5 The Coursework of Research Degree Programs:

The college offers M.Sc. Engineering (by Research) and Ph.D programs. For details, refer to the exclusive Academic Rules & Regulations for Research Programs as per VTU regulations.

OTHER ACADEMIC MATTERS

7.1 Temporary Withdrawal:

A student may withdraw temporarily from the program on grounds like prolonged illness, grave calamity in the family or any other genuine reason. The withdrawal shall be for periods which are integral multiples of a semester, provided that:

- The student applies to the college within 6 weeks of the commencement of the semester or from the date he/she last attended the classes, whichever is later, stating fully the reasons for such withdrawal, together with supporting documents and endorsement of his/her parent/guardian.
- The college is satisfied with the genuineness of the case and that, even by taking into account the expected period of withdrawal, the student can complete the program requirements within the time limits specified by the university.
- The student does not have any dues or demands at the college/university including tuition and other fees as well as library material.

A student availing of temporary withdrawal from the college under the above provision shall be required to pay such fees and/or charges as fixed by the College until his/her name appears on the students' roll list. However, the fees/charges once paid shall not be refunded.
Normally, a student is entitled to avail the temporary withdrawal facility only once during his/her

studentship of the program. However, any other concession for the concerned student shall have to be approved by the Academic Council of the college. Hence, the students shall be advised by the Principal to use this provision only in exceptional cases.

7.2 Termination from the Program:

A student shall be required to withdraw from the program and leave the college on the following grounds:

7.2.1 Successive Failures: If a student fails (Grade F) to pass a course and earn the credits prescribed for the Course even after five attempts, the admission of the student to the program shall be terminated. However, such a student can seek admission to the program afresh.

7.2.2 Failure to secure CGPA ≥ 5.00 on three consecutive occasions to lead the student being asked to discontinue the program and leave the College. However,

- Failure to secure a CGPA ≥ 5.00 at the end of any semester for the first time, to attract warning before approval of the student to continue in the following semester (on probation).
- There is a provision for the rejection of total performance of a semester and re-registration for the semester. This shall be done only once in the entire period of program.

7.2.3 Absence from classes for more than six weeks at a time in a semester without leave of absence is granted by the competent authority. Failure to meet the standards of discipline as prescribed by the college from time to time.

7.3 Students' Feedback:

a) The college obtains feedback from students on their course work and various academic activities conducted. The feedback is obtained on-line from the students at regular intervals maintaining the confidentiality.

b) The feedback received from the students is reviewed / discussed by a committee constituted for the purpose and necessary corrective measures are taken.

7.4 Recommendations for Award of Degree:

- The College forwards its recommendations to the University in respect of students qualifying for UG/PG/Research Degree awards based on their success in the examinations/adjudication of theses as the case shall be after receiving approval from the Authorities/Bodies of the College concerned.
- The college ensures that each such student in (a) has fulfilled all the requirements for the Degree Award.
- Only those students recommended for the Degree Award shall be entitled to receive the relevant Provisional Certificates/Transcripts from the College at this stage.

7.5 Graduation Ceremony:

The College conducts annual Graduation Day ceremony for the award of Degrees to students completing the prescribed academic requirements. The Graduation Day is conducted after the University Convocation. The College awards Ranks and Medals to the meritorious students during the Graduation Day Ceremony to encourage the students to strive for excellence.

NOTE**:** Only such students who have completed the academic requirements for the award of a specific degree within the normal duration (Section 5.4(a)) shall be eligible for awards.

Examination Regulation (Autonomous System)

8.0 Organization Structure of Examination Section

Assessment and evaluation are an integral part of academic process. Given that the institute has adapted an innovative curriculum for the new batch of students, the assessment and evaluation of students' learning outcomes also need to be comprehensive and continuous. The examination section is appropriately structured to carry out all the assessment and evaluation activities under autonomous system. It discharges the responsibility of conduction and overseeing both Continuous Internal Evaluation (CIE) and Semester End Examination (SEE), evaluation of student responses, publication of results, maintenance of all examination related documents and submission of periodic reports to higher and regulatory authorities. The organization structure of examination section is shown in Fig. 1.

The examination section will coordinate with the Board of Examiners (BoE) of every department for the smooth conduction of its activities. The BoE of a Department functions in close liaison with the corresponding Board of Studies (BoS) and meets at least once in a semester before the commencement of the examinations. The BoE evaluates the methods of assessment and evaluation to be done for various types of courses and suggests any improvement if needed.

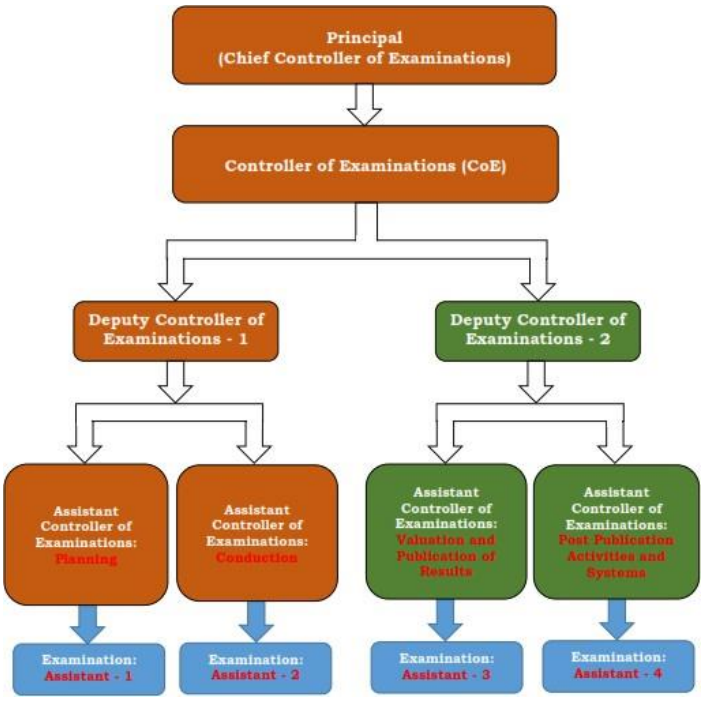

Fig. 1. Organization Structure of Examination Section

BoE is responsible for the assessment and evaluation methods used in the scrutiny of CIE and SEE for their appropriateness to measure the learning outcomes expected of the course. The general composition of the BoE is as shown in Table 14.

Table 14: Composition of the Boards of Examiners (BoE)

Sl. No.	Person	Designation
1.	Head of the Department	Chairman
2.	Faculty – Specialization 1	Member
3.	Faculty – Specialization 2	Member
4.	Faculty – Specialization 3	Member
5.	External Expert 1	Member
6.	External Expert 2	Member
7.	Invitee	Member

8.1. Assessment

The assessment of students' performance in course work during and/or at the end of a course has to be done using examinations and alternate assessment methods. In general, an examination may have different objectives, like achievement testing, prediction testing, endurance testing, creativity testing and testing for ranking. In technical education, the assessment has to be preferably of the achievement-testing type, so that a student's knowledge, skills and attitude, in other words overall competence, in the courses studied are properly assessed and certified. In

addition, testing ones out of the box thinking, ability to collaborate, communicate and think critically also become important.

8.1.1 Achievement Testing

The regulations given below enable the autonomous colleges to achieve the goals of achievement testing, gain confidence and respect of the stakeholders, particularly students. Typically, achievement testing is done in two parts as follows, both of them being important in assessing a student's achievement.

- **Sessional Assessment:** Involves Continuous Internal Evaluation (CIE) to be conducted by the course coordinator all through the semester. This may include compulsory tests, and alternate assessment tools. For Alternate Assessment Tools (AAT), a standard library of which will be made available.

- **Terminal Assessment:** Involves Semester-End Examination (SEE) to be conducted by the course coordinator jointly with an additional examiner (Internal/External) at the end of a semester on dates to be fixed at the college level. This may include a written examination for theory courses and practical/design examination with built-in oral part for laboratory/design courses, or any other method approved by BoE and Academic Council (AC) of the college.

- Both CIE and SEE being equally important in judging the course work performance of students, they need to be conducted with equal gravity and equal seriousness in the credit system. This makes it necessary that both of them are assigned equal (50:50) weightage. A student's performance in coursework shall be judged by taking into account the results of both CIE and SEE individually and together by giving equal weightage for them. This practice is followed for all courses offered and for all programs.

- **Compulsory Tests:** Three tests are compulsory, and the average score of three tests along with the scores obtained in the AAT shall be considered for computing the final CIE score of a student in a given course. The sessional assessment shall be conducted by the course coordinator with due approval from the Program Assessment Committee (PAC). Advance notification about the structure and scheme of the sessional assessment shall be made to all the concerned and its responsibility lies with the PAC.

- **Compensatory Test:** A compensatory test in a course shall be provided to those students who have satisfactory attendance in the corresponding course but remained absent for the test due to valid reason. This provision is only for one test in a course. However, the committee constituted by the college will determine the validity of the circumstance. Hence, the compensatory test is conducted purely to address genuine cases.

The purpose of conducting sessional assessments is to ensure continuous learning as well as measure it.

8.2 Question Papers

(a) Guidelines for Question Paper Setting: For an effective achievement testing of students in a course, a good question paper needs to be used as the primary tool. This makes it necessary for the question papers used at CIE and SEE to:

- Cover all sections of the course syllabus uniformly.
- Assess the specified course outcomes appropriately
- Comply with revised Blooms taxonomy
- Be unambiguous and free from any defects/errors.
- Emphasize knowledge testing, problem solving and quantitative methods.
- Contain adequate data/ other information on the problems assigned.
- Have clear and complete instructions to the candidates.

Question Paper Pattern: Question papers for compulsory tests and SEE of theory courses shall have some choice in the questions to be answered. It is necessary for the question papers at SEE, in particular, to have built-in choice in each module. This factor shall be taken note of and strictly followed by each Autonomous College, while planning for the question papers. Hence, it is necessary for the course syllabi to be drafted properly, be defect-free and properly given in modular form to enable the setting of good question paper covering the whole syllabus. These aspects have to be taken into account, in particular, by the BoS.

(c) Typical Question Paper: The questions to be included in the question papers at CIE and SEE can be of two types as follows. The course coordinators as well as the external examiners shall have to be well trained/experienced to set them.

• ***Multiple Choice Question***, having each question to be answered by tick marking the correct answer from the choices (commonly four) given against it. Such a question paper to be useful in the testing of knowledge, skills, comprehension, application, analysis, synthesis, evaluation and understanding of the students. However, SEE question papers to include no more than 15% to 20% of questions of this type.

• ***Comprehensive Questions***, having all questions of the regular type to be answered in detail. Such a question paper to be useful in the testing of overall achievement and maturity of the students in a course through long questions relating to theoretical/practical knowledge, derivations, problem solving, modeling, simulation, design, application and quantitative evaluation. Questions of this type are included in both CIE and SEE.

8.3 Examinations

(a) Maintenance of Standards: For ensuring a high standard in both CIE and SEE fully meeting the provisions of the University statutes and being able to declare the results of students' performance at both of these in a time bound manner as per the academic calendars, BMSIT&M shall follow a few guidelines given below for conducting the examinations:

(i) CIE: The CIE shall be conducted exclusively by the course coordinators as per the institutional calendar of events. The instructor to spell out the components of CIE to the students before the commencement of the course, maintain transparency in its operation, declare the evaluation results in time and then show the answer scripts and assignment sheets to them as soon as possible and secure them under custody. The course coordinator shall also solve the questions from these test papers during tutorial sessions for the benefit of all the students concerned, especially slow learners.

(a) Assessment Patterns for CIE

The CIE shall be conducted by the faculty/teacher handling the Course. It is the responsibility of the faculty handling a course to spell out the teaching/assessment pattern of the CIE such as tests, assignment, seminar, term paper, open-ended experiments, mini-projects, case-study video analysis, MOOCs etc. and also the necessary rubrics to students well in advance. The faculty shall maintain transparency, announce the CIE results well in time.

Alternative Assessment Tool (AAT)

In order to encourage innovative assessment methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). Thus AAT enables faculty to employ innovative methods and design own assessment patterns during the CIE. However, the usage of AAT is completely optional. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning space. Some possible AAT are: seminar/ assignments/term paper/ open-ended experiments/ mini-projects/ concept videos/ video analysis/case-study & analysis/experiments/partial reproduction of research work/ oral presentation of research work/ group activity/ developing a generic tool-box for problem solving/ report based on participation in create-a-thon/ make-a-thon/code-a-thon/hack-a-thon conducted by reputed organizations/any other. A library of AATs shall be prepared and the course coordinator shall choose the appropriate ones for assessing the topic under consideration. However, it is mandated for a faculty to announce the AAT in the respective class before the commencement of a course.

(b) Assessment Patterns for BE/M.Tech/MCA programmes including AAT

Both CIE and SEE have equal (50:50) weightage. Student's performance in a course shall be judged by taking into account the results of CIE and SEE individually and also together. The CIE question paper comprises two parts, namely Part-A and part-B. Part A consists 5 questions and student should answer any 4 questions. The questions are framed using K3 to K5 levels of the revised Bloom's taxonomy. Part – B consists of case-study question which is compulsory. Preferably, all questions shall be of innovative type.

Typical distribution of weightage for CIE & SEE for Regular Courses and laboratory course is shown in Tables 15 and 16, respectively. If AAT is employed, the concerned course coordinator shall prescribe the pattern of assessment prior to commencement of the classes.

Table 15: Assessment Pattern for CIE and SEE (Theory Course)

Component		Marks	Average Marks	Total Marks
CIE	Internal – 1	Conducted for 50 M and Reduced to 25 M	25	50
	Internal – 2	Conducted for 50 M and Reduced to 25 M		
	Internal – 3	Conducted for 50 M and Reduced to 25 M		
	Compensatory Test	Conducted for 50 M and Reduced to 25 M		
	AAT	Conducted for 50 M and Reduced to 25 M. **Note:** minimum 03 AATs/course shall be used by the course coordinators. The program assessment committee (PAC) and HoD will play the advisory role in deciding the AAT.	25	
SEE	Semester End Examination	Conducted for 100 M and Reduced to 50 M Comprises **Part – A** : 20 M of MCQ **Part – B**: 80 M, 05 Descriptive Questions of 16 marks each with an internal choice	-	50
Total Marks: CIE and SEE				100

Table 16: Assessment Pattern for CIE and SEE (Laboratory Course)

Component		Marks	Average Marks	Total Marks
CIE	Internal - 1	Conducted for 50 M and Reduced to 10 M	10	50
	Internal - 2	Conducted for 50 M and Reduced to 10 M		
	Cumulative performance and Record write-up	Assessed for 50 M and Reduced to 15 M	15	

	AAT	Conducted for 50 M and Reduced to 25 M. **Note:** minimum 03 AATs/course shall be used by the course coordinators. The program assessment committee (PAC) and HoD will play the advisory role in deciding the AAT.	25	
SEE	Semester End Examination	Conducted for 100 M and Reduced to 50 M **Note:** No MCQs in SEE	-	50
Total Marks: CIE and SEE				100

Note: All the internals are compulsory and the compensatory test is conducted for the students who are absent for the compulsory tests with genuine reason. The permission shall be obtained from the HoD on producing the documentary evidence for their absence.

(c) Assessment Pattern for M.Tech and MCA programmes

The Programme Outcomes of the M.Tech and MCA programme have enhanced focus on Research, together with a need to demonstrate mastery in the area of specialization. Hence, flexibility is provided to the course coordinator to evolve innovative methods for evaluation through the course and its assessments. Both CIE and SEE have equal (50:50) weightage. However, the student's performance in a course shall be judged by taking into account the results of CIE and SEE individually and also together, as shown in Table 17.

Table 17 Assessment Pattern for M.Tech and MCA Programmes

Component		**Marks**	**Average Marks**	**Total Marks**
CIE	Internal – 1	Conducted for 50 M and Reduced to 25 M	25	50
	Internal – 2	Conducted for 50 M and Reduced to 25 M		
	Internal – 3	Conducted for 50 M and Reduced to 25 M		
	Compensatory Test	Conducted for 50 M and Reduced to 25 M		
	AAT	Conducted for 50 M and Reduced to 25 M. **Note:** minimum 03 AATs/course shall be used by the course coordinators. The program assessment committee (PAC) and HoD will play the advisory role in deciding the AAT.	25	
SEE	Semester End Examination	Conducted for 100 M and Reduced to 50 M Comprises **Part – A** : 20 M of MCQ **Part – B**: 80 M comprehensive questions from each module carrying 16 marks each.	-	50
Total Marks: CIE and SEE				100

(ii) SEE: The SEE shall be conducted jointly by course coordinator and an external examiner appointed for this purpose by the autonomous college. The SEE is conducted for 100 marks are awarded by means of an examination. The Question paper for each course contains two parts, Part-A and Part-B. Part-A consists of objective type questions for 20 marks covering the complete syllabus. Part-B consists of comprehensive questions, one from each module carrying 16 marks adding up to 80 marks (Internal choice shall be given)

(iii) SEE Answer Scripts: The answer scripts of SEE may be normally evaluated by the course coordinator only. However, as a healthy step, an examination committee at the college to preferably oversee this task and ensure the quality and standard of evaluation and of the grades awarded in all the cases. The next step to be taken before declaring the results, to include an external review of the SEE conducted.

(iv) External Review of SEE: An external review shall be conducted under the aegis of the BoS/BoE of the college by appointing a panel of experts from outside the college for this purpose aiming at a complete review of SEE operation in the college. This may include such steps as, question paper review, checking random samples of answer scripts, analysis of results/grades awarded and other related aspects. This step to be also necessary for gaining the confidence of the University and of the society, on the fairness, transparency and acceptability of the examination practice among the stakeholders.

(b) Attendance Standards: All students of the college shall maintain a minimum attendance of 85% in each course registered. In case of any short fall in this, the Academic Council of the college shall consider the same and may condone the deficiency in special cases up to 10%. Any student failing to meet the above standard of attendance in any course(s) registered may not be allowed to appear for SEE of such course(s). Alternatively, the guidelines issued by the All India Council for Technical Education (AICTE) in this regard may be followed.

(c) Attendance at CIE and SEE: Attendance at all examinations, both CIE and SEE of each course registered shall be compulsory for the students and there shall not be any provision for re-examinations without a valid reason. Any student against whom any disciplinary action by the college/University is pending may not be permitted to attend any SEE in that Semester.

(d) Passing Standards: To maintain high standards in all aspects of examinations at the college, the college shall follow the standards of passing at CIE and SEE for each course as given in Table 18.

Table 18: Passing Standard using Absolute Grading

Evaluation Method	Passing Standard
Sessional (Continuous Internal Evaluation)	Score: ≥40%

Terminal (Semester End Examination)	Score: ≥40%

(e) Project work Evaluation: The CIE of the project work shall be based on the progress of the student in the work assigned by the project supervisor periodically evaluated phase wise (i.e. three phases) by him/her together with a Project Evaluation Committee (PEC) constituted for this purpose by the department.

PEC comprises two faculty of the department/program-wise and one faculty supervisor/Project guide (as assigned by the department for every student/student group).

Seminar presentation, project report (dissertation) and final oral examination conducted by a common PEC at the Department/College level shall form the SEE of the project work.

The Project Guide and an External examiner shall jointly conduct the evaluation of SEE of the project work.

(f) Plagiarism index for Project report/Thesis:
All project reports shall go through the plagiarism check and the plagiarism index has to be less than 20%. The project reports needs to be checked by the project guide well before the examination to confirm it complies to be less than 20%. Thesis/Project reports with plagiarism more than 20% shall be rejected.

(g) Other Courses: In the case of other requirements, such as seminar, industrial internship, fieldwork, comprehensive viva voce, if any, the assessment shall be made as laid down by the Academic Council of the college with standard rubrics.

(h) There shall be no re-examination for any course in the credit system to take care of such students:

- Who have absented themselves from attending CIE or SEE without any valid reason;
- Who have failed (Grade F) to meet the minimum passing standard prescribed for CIE and/or SEE;
- Who have been detained for shortage of attendance in any coursework
- Who have withdrawn (Grade W) from a Course.

Such students shall be required to re-register for the course(s) and go through CIE and SEE again and obtain a Grade E or above. While such students shall have to re-register for the same course(s) if hard-core, they can re-register for alternative course(s) from among the soft core or elective courses, as applicable. The re-registration shall be possible only when the particular course is offered again either in a main (Odd/Even) or a supplementary semester.

(i) Successive Failures: If a student fails (Grade F, as covered in section 3.4) to pass a course and earn the credits prescribed for the course even after five attempts, the admission of the student to the program shall be terminated and the student shall be asked to leave the college. However, such a student may seek admission to the program a fresh.

(j) Monitoring/Assessment for Research Degrees: Students registered for Research Degrees shall be monitored and assessed at college level. For details, refer to the exclusive academic rules & regulations for research programs.

8.4 Grading

(i) General

In recent years, the grading system has replaced the evaluation of students' performance in a course based on absolute marks, because of its many advantages. Therefore, the college shall follow this practice. Here again, it is necessary to maintain uniformity in the grading practices at different colleges to ensure that the migration of students or transfer of credits among Autonomous Colleges under the University is made easy.

(ii) Letter Grades

A letter grade is basically a qualitative measure (an alphabet/letter) showing the performance of a student such as Outstanding (S), Excellent (A), Very Good (B), Good (C), Above Average (D), Poor (E) and Fail (F), based on the raw score (marks, as in conventional practice) obtained by the student. This is usually arrived at after the student's performance in a course (which includes both CIE and SEE) is assessed and a total raw score (marks) is awarded to begin with, followed by awarding the grade based on the score category into which the raw total score falls. The letter grades and the associated quality are shown in Table 19.

Table 19: Relative Grading Levels

Level	Out-standing	Excellent	Very Good	Good	Above Average	Poor	Fail
Grade	S	A	B	C	D	E	F

(iii) Grade Points

(a) Depending on the letter grades assigned, a student earns certain grade points. As the grading system can have different scales for grade points (like 5, 8, and 10) with more number of points in the scale being desirable for providing higher resolution in the assessment. Moreover, all Autonomous Colleges under the University need to follow the same scale for uniformity in their operations. Hence, the college shall follow the 10-point grading system, as given in Table 20 for both the relative grading system and the absolute grading system.

Table 20: Grade Points Scales for both Relative and Absolute Grading

Level	Out standing	Excellent	Very Good	Good	Above Average	Average	Fail
Score (Marks) Range %	>=90	>=80 <90	>=70 <80	>=60 <70	>=50 <60	>=40 <50	<40
Grade	S	A	B	C	D	E	F
Grade Points	10	9	8	7	6	4	0

(b) Credit Points: The grade points given in Table 7 helps in the evaluation of credit points earned by the student in a course as the credit points are equal to the number of credits assigned to the course multiplied by the grade points awarded to the student in that course. This shall be used in arriving at the credit index of the student for that semester, as it is the sum total of all the credit points earned by the student for all the courses registered in that semester.

(c) Earning of Credits: A student shall be considered to have completed a course successfully and earned credits if he/she secures an acceptable letter grade in the range S to E. Letter grade F in any course implies failure of the student in that course and no credit shall be earned.

(d) Transitional Grades: The transitional grades, such as, 'I', 'W' and 'X' shall be awarded to a student in the following cases. These grades need to be converted into one or the other of the letter grades (S-F) after the student completes his/her course requirements, including the examinations.

(i) Grade 'I': Awarded to a student having satisfactory attendance at classes and meeting the passing standard at CIE in a course, but remained absent from SEE for valid and convincing reasons acceptable to the college, like:

- Accident or severe illness leading to hospitalization, which disables the student from attending Semester End Examination (SEE);
- A calamity in the family at the time of SEE, which requires the student to be away from the college;
- In the event of above mentioned points, it is the responsibility of the student/ parent/ guardian to inform the college authorities (proctor/HOD) immediately. The information can be either written communication, personal communication by parent/guardian/peer or an e-mail or mobile message. The candidate needs to submit all the relevant evidences (hospital reports, police reports, certificates from competent authorities, etc.). Any intimation after the conduction of examination shall not be entertained.

(ii) Grade 'X': Awarded to a student having attendance ≥85% and CIE rating (≥90%) in a course, but SEE performance observed to be poor, which could result in an overall 'F' Grade in the course. No 'F' Grade is awarded in this case but student's performance record is maintained separately. The student will be provided an opportunity to improve performance in the make-up examination.

(iii) Grade 'W': Awarded to a student having satisfactory attendance at classes (≥85%) as on the date of course withdrawal (as specified in the calendar), but withdrawing from that course before the prescribed date in a semester under faculty advice (students who have applied for condonation of attendance are not eligible to apply for W Grade). However, the students' needs to maintain the required credit limits for the semester (minimum 16 and maximum 28 credits). All the 'W' grades awarded to the students shall be eligible for conversion to the appropriate letter grades only after the concerned students re-register for these courses in Odd/Even/Supplementary semester and fulfill the passing standards.

A student is not allowed for course withdrawal during the Supplementary semester.

(e) Make-up Examination

The Make-up Examination facility shall be available to the students who have been awarded the transitional Grades (I-Grade or the X- Grade). The Make-up Examination shall be held as per dates notified in the Academic Calendar. The standard of the Make-up Examination shall be the same as that of the regular SEE for the courses. The student will be provided an opportunity in the make-up exam. The Grade earned by the student will be retained in case of 'I' Grades, while in the case of 'X' Grades, the student will be awarded the next lower passing Grade (that is: grades ('D' to 'S') will be reduced to the next lower grade, while the Grade 'E' will remain unchanged).

(f) All the 'I' and 'X' grades awarded to the students shall have to be converted by the course coordinators concerned to appropriate letter grades and communicated to the college authorities within two days of the respective Make-up Examinations. Any 'I' and 'X' grades still not converted within two days after the last scheduled Make-up Examinations shall be automatically converted to 'F' grade.

(g) All the 'W' grades awarded to the students shall be eligible for conversion to the appropriate letter grades only after the concerned students re-register for these courses in a main(odd/even)/supplementary semester and fulfill the passing standards for their CIE and (CIE + SEE) as prescribed at the college.

(h) In the event of a student in his/her final semester fails in a Laboratory course and/or in CIE of a course, the student shall be given 'I' grade for such course(s). In such a case, the course coordinator concerned may grant extra time not exceeding 12 weeks for completing the course, with the concurrence of the Head of the Department and the Principal. If no such extra time is

sought/granted, the concerned student shall have to re-register for the course(s) in a succeeding semester and fulfill the requirements for the award of the Degree.

(i) Grade Card: Each student shall be issued a Grade Card (or transcript) at the end of each semester. While this will have a list of all the Courses registered by a student in the semester together with their credits, the letter grades with grade points awarded in each case and those with grades 'I', 'W' and 'X', only those courses registered for credit and having grade points shall be included in the computation of the student's performance, like SGPA and CGPA. In addition, the courses taken for audit will not form part of this computation. The results of mandatory courses, which are of the non-credit type, shall also be reflected in the Grade Card as PP (for Passed) or NP (for Not Passed). It may be noted that each UG student shall have to obtain the grade PP in each mandatory course to qualify for the Degree award by the University.

8.5 Grade Point Averages

(a) SGPA and CGPA

The credit index can be used further for calculating the **Semester Grade Point Average (SGPA)** and the **Cumulative Grade Point Average (CGPA)**, both being important academic performance indices of the student. While SGPA is equal to the credit index for a semester divided by the total number of credits registered by the student in that semester, CGPA gives the sum total of credit indices of all the previous semesters divided by the total number of credits registered in all these semesters. Both the equations together facilitate the declaration of academic performance of a student, at the end of a semester and at the end of successive semesters respectively. Thus,

$$SGPA = \frac{\sum[\text{Course Credits} \times \text{Grade Points}]\text{for all the Courses registered in that Semester}}{\sum[\text{Course Credits }]\text{ for all the Courses in that Semester}}$$

$$CGPA = \frac{\sum[\text{Course Credits} \times \text{Grade Points}]\text{for all Courses excluding those with F until that Semester}}{\sum[\text{Course Credits }]\text{for all Courses excluding those with F gradees until that semester}}$$

(b) Illustrative Example: An illustrative example given in Table 21 indicates the use of the two equations in calculating SGPA and CGPA, Both of them shall be normally calculated up to the second decimal position, so that the CGPA, in particular, can be made use of in rank ordering the students' performance of in a class at an autonomous college. If two students get the same CGPA, the tie may be resolved by considering the number of times a student has obtained higher SGPA. But, if it is not resolved even at this stage, the number of times a student has obtained higher grades like S, A, B, maybe taken into account in rank ordering of the students in the class.

(c) Vertical Progression: It shall also be necessary to lay down uniform minimum standards for SGPA and CGPA together with the minimum number of credits to be earned in a semester for the vertical progression of students at all Autonomous Colleges. This shall be used to facilitate the mobility of students from one college to another and also to avoid any confusion among the students.

Table 21: SGPA/CGPA Calculations: An Illustrative Example

Semester (Odd:1, Even :II)	Course No.	Credits	Grade	Grade Points	Credit Points	SGPA, CGPA
I	XX101	5:0:0	B	8	40	$SGPA = 117/20 = 5.85$
I	XX102	3:2:0	W	-	--	
I	XX103	3:0:0	A	9	27	
I	XX104	0:1:1	F	0	00	
I	XX105	4:1:0	D	6	30	
I	XX106	5:0:0	E	4	20	
	Total	20 (18*)		Total	117	
II	XX107	3:1:1	C	7	35	$SGPA = 157/25 = 6.28$
II	XX108	4:0:0	B	8	32	
II	XX109	3:0:0	D	6	18	
II	XX110	4:1:0	E	4	20	
II	XX111	2:1:1	A	9	36	$CGPA = 274/41 = 6.68$
II	XX112	2:0:0	F	0	00	
II	XX113	0:2:0	B	8	16	
	Total	25 (23*)		Total	157	
Supplementary	XX102	3:2:0	D	6	30	$SGPA = 56/9 = 6.22$
Supplementary	XX104	0:1:1	C	7	14	
Supplementary	XX112	2:0:0	D	6	12	$CGPA = 330/50 = 6.60$
	Total	9		Total	56	
*Total No. of credits excluding those with 'F' and 'W' grades. Particularly important to keep track of the number of credits earned by a student up to any semester.						

The prescribed standards for vertical progression shall be as follows:

1. The range of minimum and the maximum credits to be earned in an academic year (inclusive of supplementary semester, if any):
    (i) First year: ≥30 to ≤ 40 credits
    (ii) Second year and third year: ≥ 32 to ≤ 56 credits
2. Minimum standard for SGPA = 5.0
3. Minimum standard for CGPA = 5.0 (At the end of each academic year).
4. Further, at the end of each academic year (inclusive of supplementary semester), the number of heads with "F" of any semester shall not exceed 4. And, failure to secure a minimum CGPA = 5.0 at the end of any semester for the first time, shall attract a warning before approval of the student to continue in the following semester and such a student shall be placed on probation.

Note: From II year onwards, the number of maximum credits that a student can register in a semester shall be 28. In any case, the number of credits shall not be less than 16 after dropping/ withdrawal of a course/(s) in that semester.

(d) Award of Class: Sometimes, it is necessary to provide equivalence of these averages, viz., SGPA and CGPA with the percentages and/or Class awarded as in the conventional system of declaring the results of University examinations. This shall be done by Autonomous Colleges under the University only at one stage by prescribing certain specific thresholds in these averages for First Class with Distinction, First Class and Second Class, at the time of Degree Award. This provision given in Table 22 follows the approach of the Council for this purpose as reproduced from the AICTE Approval Process Handbook:

Table 22: Percentage Equivalence of *Grade Points*
(For a 10 – Point Scale)

Grade Point	Percentage of Marks/Class
5.75	50
6.25	55
6.75	60
7.25	65
7.75	70
8.25	75

Note: (1) The following formula for conversion of CGPA to percentage of marks to be used only after a student has successfully completed the program:

Percentage of Marks = ($CGPA$ – 0.75) × 10

OTHER ISSUES

9.1 Quality / Standard:

The quality/standard of engineering professionals is closely linked with the level of the technical education system. As it is now recognized that these features are essential to developing the intellectual skills and knowledge of the professionals for being able to contribute to the society through productive and satisfying careers as innovators, decision-makers and/or leaders in the global economy of the 21st century, it becomes necessary that certain improvements are introduced at different stages of their education system.

These requirements include:

- Selective admission of students to a program, so that merit and aptitude for the chosen technical branch or specialization are given due consideration.
- Faculty recruitment and orientation, so that qualified teachers trained in good teaching methods, technical leadership and students' motivation are available.

- Instructional/Laboratory facilities and related physical infrastructure, so that they are adequate and at the contemporary level.
- Access to good library resources and Information and Communication Technology (ICT) facilities, to develop the student's self-learning abilities.
- Adequate opportunities and facilities for the development of the student's aptitudes and attitudes so that the professionals are conscious of social/other responsibilities.

9.2 Interpretation

Any question as to the interpretation of these rules and regulations shall be decided by the College, whose decision shall be final and binding on the student in the matter. The College shall also have the power to issue clarifications to remove any doubt, difficulty or anomaly, which may arise concerning the implementation of these regulations.

:: NOTE::

One or more of these rules and regulations may be altered/modified/revised/upgraded/changed/ deleted from time to time by the academic council. Ignorance of or failure to read and understand the academic and examination regulations is not an excuse and not acceptable.

BMS Educational Trust (BMSET) Educational Institutions

1. BMS College of Engineering (BMSCE), Bengaluru
2. BMS Institute of Technology and Management (BMSIT&M), Bengaluru
3. BMS Evening College of Engineering (BMSECE), Bengaluru
4. BMS School of Architecture (BMSSA), Bengaluru
5. BMS College of Architecture (BMSCA), Bengaluru
6. BMS College of Law (BMSCL), Bengaluru
7. BMS Degree college for Women (BMSCW), Bengaluru
8. BMS Evening College of Arts and Commerce (BMSCE), Bengaluru
9. BMS Pre-University College for Women (BMSPUCW), Bengaluru
10. BMS Centre for Executive Education & Distance Learning (BMSCEEDL), Bengaluru
11. BMS College of Commerce and Management (BMSCCM), Bengaluru
12. BMS Training and Research Institute (BMSTRI), Bengaluru

Plan of BMSIT&M Campus

BMSIT&M NCC

Annual Alumni Meet 2020

Clubs & Associations

Seminar hall in Academic block

BMS Educational Trust

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