DISCLAIMER

The information written in the booklet is only meant to be a guideline to the sophomore students. It may happen that the Information or rules mentioned in the booklet may face an amendment or change at any time. Please confirm the rules/details from competent authorities before making any decisions.

A WORD FROM GSAA

Hello Dear Sophomores.

It is so pleasant to see you enter into your second year at IIT Bombay. Hope you had an amazing and a joyful ride through the first year and a wonderful summer break.

Your first year opened you to new arenas, a new culture and a new environment, things to which you would have become much habitual by now. Undoubtedly you would have realized the vast ocean of opportunities available to you, both curricular, co-curricular and extracurricular. And how immensely important it is to balance your academics with your extracurrics here at IIT Bombay.

Now, coming into your second year, you will experience a big difference especially in terms of your academics. Your first year curriculum was very rigid, with you completing a defined set of courses. As a sophomore, you will be privileged with much more freedom. Not only do you have the flexibility of choosing your own courses from a vast pool of running courses, you can now delve into opportunities and facilities IITB is much renowned for. The foreign exchange program of the institute (perhaps the best in the country), URA, internship opportunities etc will help you broaden your horizons both academically and intellectually.

This booklet has been designed specifically to brief you of these topics and much more, so that you can have a perspective of what all is available and choose to orient yourselves accordingly. Please read through to learn more and make an informed decision on how you want to direct yourselves. Do remember that nlike your first year there are no ISMP mentors to guide you. So the onus to keeping yourselves well aware rests solely on you.

Lastly, enjoy the sophie year. Its going to be much different than your first year, that is guaranteed. Your new hostel life awaits you. Many of you must have already entered the new, and if I may say, the glamorous world of POR's. However, do not lose track of your academics for the semester is going to become challenging (and full of quizzes :P). Those who had a satisfactory first year academically, keep up the good effort. Those who did not, believe me, it is not late to start.

Wish you all the very best!!!

Shubham Goyal
General Secretary Academic Affairs

Completing the first year of studies where students study all the common courses, they move into a world of specialised learning where the semester curriculum lopsides towards department specific courses. While this transition occurs, a plethora of opportunities opens up for the now sophomore students. To name a few will be Semester Exchange, Internship and Undergraduate research but first let's take a look at the Registrations, which the sophomores face for the first time.

REGISTRATION

IIT Bombay follows a specialized credit based semester system, therefore registration at the beginning of each semester (lookout for dates in the Academic Calendar) is mandatory for you till you complete your programme.Without registration, any academic activity (course /seminar / project etc.) that you undergo will not be counted towards the requirements of your degree.

SEMESTER -WISE REGISTRATION

You can register for the courses you intend to take during a given semester on the basis of the programme for your discipline as given in your curriculum and as per the advice given by your Faculty Advisor. You can check a particular semester's curriculum on ASC in Academic --> All about courses --> Bulletin Report section. From third semester onwards, registration is dependent on the academic standing of the student.

ACADEMIC STANDING

Depending on the overall academic performance of a student till date, especially in the two preceding registered regular semesters (autumn and spring), academic standing of the student is decided. It's categorized as follows:

CATEGORY I
A student who has no backlog courses (failed courses which have not been cleared subsequently or dropped courses), and has a CPI equal to or greater than 8.0, subject to having cleared the total number of credits prescribed up to that semester in his/her discipline.

CATEGORY II
A student who has registered for at least 18 credits in each of the two preceding regular registered semesters and not failed in any course in these two semesters.

CATEGORY III
A student who has not failed in more than one course in the two preceding regular registered semesters, subject to having earned at least 18 credits in each of the semesters.

CATEGORY IV
A student who has failed in more than one course in the two preceding regular registered semesters, but has earned at least 18 credits in each of the semesters.

CATEGORY V
A student who has not earned at least 18 credits in either one of the previous two regular registered semesters.

**Only students of standing of Category I, II or III are permitted to register for Normal load.
Category IV and Category V students should register for lower credits.**

NORMAL LOAD | OVER LOAD

There is a credit limit prescribed for each academic standing is called the normal load.
These credit limit are as following:
Category I: 52
Category II: 44
Category III: 44
Category IV: 36
Category V: 24

Any overload over and above this will have to be approved by the Faculty Advisor.
Note: Every student however is required to register for a minimum of 18 credits in any semester.
To clarify a bit more….

NORMAL LOAD FOR B.TECH AND INTEGRATED MSC.

- In the third semester and later, normal load for a B.Tech. or an Integrated M.Sc. student is defined as the pre-scribed load for the minimum requirement of the degree for that semester and credits for an additional course (6-8 credits), subject to total credit not exceeding 42 credits (44 credits in case the additional course is of 8 credits), and theory courses not exceeding 6.
- For example, the prescribed credits in semester 3 for a particular discipline may be 33. The normal load for that discipline in the semester is therefore 39-41. This load is calculated by adding the prescribed credits and credits for an additional course (6 or 8 credits). The normal loads for other semesters are to be computed along similar lines. Students with academic standing of Category I, II or III are permitted to take normal load.
- Those with excellent academic standing (Category I) can, in addition, overload themselves to the extent of one theory course equivalent (6 or 8 credits). That is, they can register for two courses in addition to the prescribed load, subject to total credit not exceeding 48 credits (50 credits in case the additional courses are of 8 credits), and theory courses not exceeding 6 in number.
- Students belonging to academic standing I and academic standing II therefore can reasonably aspire to utilize the additional learning opportunities to the fullest extent.
- Category III students should use the additional course permitted to clear the backlog courses if available in the semester. If backlog courses are not available, they can also use the opportunity for additional learning in that se-mester.
- Students belonging to Category IV and V can only register for reduced load.

NORMAL LOAD FOR DUAL DEGREE

- Dual Degree students are typically prescribed one theory course more than the B.Tech. students every semester towards the mandatory honors and dual degree requirements. Therefore the normal load for these students will be the prescribed load itself.
- So, Category II and III students from the Dual Degree cannot register for courses towards additional learning.
- Students belonging to Category IV and V can only register for reduced loads.
- Category I students can take one course extra as an over load towards additional learning subject to total credit not exceeding 48 credits (50 credits in case the additional course is of 8 credits), and theory courses not exceeding 6.

REDUCED LOAD FOR ACADEMIC STANDING IV AND V STUDENTS

- B.Tech. and Int.M.Sc. students belonging to Academic Standing IV status can only register for a total of credits equivalent to the prescribed credits for that semester in her/his discipline. (This would normally mean four theory courses and one or two labs. etc.)
- Students belonging to Academic Standing V status can only register for those many credits which are at least one theory course equivalent less than the credits prescribed for that semester in her/his discipline, subject to a minimum of 18 credits. (This normally would mean three theory courses and one or two labs. etc.)
- Dual degree students of Category IV and Category V are advised to register for one and two theory courses respectively, less than their prescribed load and as advised by their faculty advisor.
- Students have to register for the backlog courses before registering for other courses, if those courses are available in that semester. However, Faculty Advisor can recommend exceptions to avoid cascading effects due to prerequisites for other courses.

ONLINE REGISTRATION PROCEDURE

- On-line registration process involves filling up of an online Course Registration Form (CRF) (asc.iitb.ac.in) stating the courses and project / seminar etc, that you propose to complete during that semester as per the prescribed curriculum.
- This should be done in consultation with the Faculty Advisor, who finally approves the registration.
- Unless this procedure is completed, your registration will be considered invalid.
- All students without backlogs will be able to do online registration.

MANUAL REGISTRATION PROCEDURE

- Students' having backlog course(s) is/are required to do manual registration by filling up the Course Registration Form (CRF) available in the Academic Office.
- The student should duly complete the CRF, stating the courses and project / seminar etc. that he/she proposes to complete during that semester as per the prescribed curriculum, in consultation with the Faculty Advisor, get it approved by him/her and then submit the same to the Academic Office within the stipulated date for registration.

Note: Students belonging to Category V and those with four or more backlogs should additionally submit, along with the course registration form, a revised schedule for the succeeding semesters stating how the backlog courses will be cleared, in consultation with the Faculty Advisor.

LATE REGISTRATION

Only for valid reasons, late registration may be permitted till the date specified in the Academic Calendar, on payment of a late registration fee.

REGISTRATION FOR ADDITIONAL COURSES

Only for valid reasons, late registration may be permitted till the date specified in the Academic Calendar, on payment of a late registration fee.

MINORS
Completing 30 credits in the area of your interest
- An online interface is made available during preregistrations through external ASC (www.iitb.ac.in/asc) a few days before the commencement of the Academic Year to register for Minor courses.
- The minor courses will be allotted based on CPI (Or any other criteria prescribed by the Faculty Incharge, Prerequisites etc).

MINORS
Completing 24 credits in the area of your interest
- There is no specific registration for Honors.
- You can register for the Honor courses in 'Additional Courses/ Extra Courses' section during core registrations.
- One accumulates the required credits during the course of the programme, and the additional credential is awarded if the criteria set for them are met when the student graduates.

INSTITUTE ELECTIVES
Compulsory credits although the course is of your choice (there are some excludes)
- Registration is done along with the Core registration at the start of the semester on the online interface.
- Students overloading their Semester are required to manually submit the Course Registration Form (CRF) approved by the Faculty Advisor, to the Academic Office

Note: 1XX courses, core dept. courses and many of the SOM, ENT and IDC dept. courses cannot be taken as insti electives. So, it's always better to ask the faculty in charge if the course you wish to register can be tagged as an insti elective or not.

HUMANITIES ELECTIVES
- Preregistration needs to be done for the courses offered by HSS Dept as Humanities elective or as Institute Electives (Humanities Institute Elective) on the provided interface.
- Courses are allotted on the CPI basis (Or any other criteria prescribed by the Faculty Incharge)
- Once allotted (after preregistration), the HSS course will come on your registration interface on ASC, and you need to register it the way you register for core courses

Note: Humanities Elective and Humanities Institute Elective are not same.

DEPARTMENT ELECTIVES
Compulsory credits through a course of your choice from a pool of courses prescribed by your dept.
- Registration is done along with the Core Registration.
- In case of any discrepancy faculty advisors approval is to be submitted to the academic office.

ADDITIONAL LEARNING COURSES (ALC)
Your course your choice. Credits not counted towards degree completion. Although have a look at tagging rules.
- Registration done along with core registrations.
- Subject to approval by the Faculty in charge of the course and the Faculty advisor of the student.

AUDIT COURSES
Just wanting just an exposure to a course, without the rigors of obtaining a good grade
- Registrations are done along with core registrations.
- Restricted to a maximum of two (2) courses in the entire period of the programme.
- Only students in category I and II with CPI > 6.0 are permitted to 'Audit' a course during a regular semesters and summer term.

SIT THROUGH
"Chaaro taraf gyan bat raha hain, jahan se mile lappet lo"
If you are really interested in a particular course but are unable to register for the same due to some constraints (generally happens with popular minor courses). But you are still willing to sit in that course just for knowledge, without any privilege for credits or mention in transcript, then you can ask for the faculty in charge's permission to sit through that course.

WAITLIST
Wait list for courses with limited seats:
- Academic office maintains an online WAIT LIST for courses which have an enrolment cap.

(The maximum enrolment limit for courses may be viewed at ASC > Academic > All about Courses > Courses with Upper Cap post Login)
- Students registering for a course with registration limit are enrolled for the specific course on CPI basis through pre-registration and First Come First Served (FCFS) basis during normal registrations or wait listing. Therefore students registering early, stand a higher chance to get confirmed registration for popular courses.
- If a course enrolment has reached its maximum limit, students are allowed to register conditionally by maintaining a wait list.

The 'available/Wait-list' status of courses can be seen at the registration page.
- If a student having confirmed registration DROPS OUT of a course, the vacated seat is offered to the first wait listed student.
- An email (on GPO) is sent to the concerned student about the availability of the seat. This seat is blocked for the specific student for a period of 12 hours.
- Wait listed students are STRONGLY ADVISED to monitor their wait list status, and opt out of the wait list and register for alternate courses, 12-24 hours prior to the last course ADD/DROP date.

Note: SUPER-NUMERIC (more than the specified number of seats) - seats are purely upon the discretion of the course-instructor. Such seats cannot be 'applied for' online. Students have to approach the course-instructor, obtain his approval on paper, and apply for such registrations through the manual route by submitting the permission letter obtained from the course-instructor at the academic office.

SOME USEFUL NOTES

1. If you have successfully done the preregistration of a course (Minors/ HSS Electives),then at the time of registration the allotted preregistered course comes under the heading "Pre Registered Courses" on your asc interface, and you need not register for the course again under any other heading say Institute elective, Non Credit Course, Additional course etc.
2. False backlogs - If you are being shown a false backlog, then visit Academic Office and get it resolved (fastest method).
3. Slot clash - Please ask your DGSec to get it changed through the Time Table Co-Ordinator.
4. Missed Pre-registration - Register for the course online and get the override form signed by the course instructor, and submit it to Academic Office.
5. Course not listed - If you get a message on the interface saying that the course is not running this semester even though it is, please check the division ('M','S1', etc.) in the list of running courses and enter the correct division on the interface while registering for it.
6. Entering the division as 'M' will not change your tag to minor
   (All about courses --> Running Courses) e.g. CE 310 - M, MM 474 - M, CS 101 - D1/D2/D3/D4, etc.
7. Pre-requisites pains - If there are errors, please send a mail to asc.help@iitb.ac.in with a screenshot, if the grade for the pre-requisite course is not out or if you want to take a course without clearing the pre-requisite, please take permission from the course instructor on an application and submit it to Academic Office.

For further information on registrations and related topics you can visit **UG Acads wiki**

BTP | MSP | DDP

In this section, we have tried to give you an overview of final year projects and some related details about them. (The actual guidelines may vary from dept. to dept.). The details provided in this section may not seem relevant to you right now but you may want to revisit these before your project selection.

BTP I

1. Faculty advisors coordinates the BTP activity. The students have to inform their faculty advisor about the application after the permissible 'drop-add' period is over.
2. Faculty advisor then announces a date before which the examination should be completed which will be no later than the last day of the end-semester exam. This announcement is generally made during the mid-sem week. The activity of scheduling the date, time and selection of examiners shall be the responsibility of the guide of the student.
3. At the end of the conduct of the examination the grade awarded are submitted to the faculty advisor who announced the examination.
4. The faculty advisor through the HOD sends the grades to the academic office. The students who do not make presentations will automatically be given 'II'.
5. In the event that a student does not make the presentation by the scheduled date whatever may be the reason for this, the student gets an automatic extension till the last day of winter break. The highest grade that student can now get is 'BC'.
6. The option of dropping the BTP is given to the student till two weeks from the commencement of classes for the 'January (spring) semester' with the permission of the guide.

BTP II

1. Within one week from the beginning of the classes for the 'January (spring)' semester the student has to inform the concerned faculty advisor that registration has been done for this.
2. The faculty advisor may give 'FR' if item 1 has not been done. The faculty advisor again announces the date before which the final examination must be completed which will be no later than the last day of the end-semester exam.
3. Same as steps 3, 4 of BTP I.
4. In the event that the student does not make the presentation by the scheduled date, whatever may be the reason for this, the student gets an automatic extension of 30 days from the last day of the end-semester examination. The highest grade that the student can now get is 'BC'.
5. In the event that the student does not make the presentation even after the 30 days extension in summer, whatever may be the reason for this, the student gets an automatic extension for another 30 days. The highest grade that the student can now get is 'DD'.
6. After the 60 days extension the student is automatically given the FR grade.
7. Exceptions are entertained by DUGC only for medical reasons.

Project Stage I is primarily for literature survey. Written report should include a comprehensive survey of literature, objectives of the project and proposed methodology. Results and discussion, if any, also have to be included.

Project Stage II is primarily for results that you got as part of your project work. Written report should include only relevant/pertinent literature and only in brief, objectives of the project and Materials & methods, Results and discussion.

DDP (SIMILLAR CASE FOR MSP)

All the faculties of the dept. submit at least two topics. A brief statement on scope of work is recommended. This is meant to help students with the selection. Students are also encouraged to discuss with individual faculty members and know more about the topics.

All faculty members are allotted at least 1 DD student and at most 2 DD students. It is possible that some faculty members will be marked as those who must be allotted exactly 2 DD students each. This information will be shared after allotment of MTP topics which is scheduled before the DDP allotment.

The Allotment is done based on CPI Rank of the eligible Students in the batch. The students are allowed to discuss among themselves and arrive at a consensus. However, this will have to be demonstrated during the formal allotment process scheduled on the first day of instruction.

Evaluation:
1) Evaluation of all the students (of a dept.) is done by a single committee. Guides may suggest inclusion of an additional examiner for evaluation of his/her student, if they feel so.
2) Grading: (marks out of 10) >= 9, AA; >= 8, AB; >= 7, BB; >= 6, BC, etc.
3) Date of oral presentation: as declared in the Time Table / Academic Calendar; roll-number-wise

4) Duration: 15 min presentation, 10 min discussion. Please rehearse, if necessary, but ensure that you complete your presentation within the allocated time.
5) Evaluation scheme: 20% write-up editorial aspect, 20% write-up scientific content, 30% oral presentation, 30% discussion.

Some write-up tips:

1) A Write-up generally contains the following: Title page, letter of acceptance by guide(s), contents, acknowledgements, list of abbreviations, introduction, methods, results and discussion, conclusions, work proposed for Stage II, appendix, references.
Results and discussion may be combined into a single section, if necessary.
Very Imp: Write up should be your own and should not be plagiarized from any source.
2) Introduction will include literature survey and objectives of the work. The latter can be a separate section, if so desired.
3) Tables should be numbered sequentially (i.e., in the order in which they appear in the text) and should have a short, descriptive title; footnotes may be included, where necessary. Every Table should have a reference in the text at least once (and vice versa).
4) Figures should also be numbered sequentially and every figure should have an appropriate legend. Figures should be your own; if taking from published literature or from internet, include the citation or the complete URL.
5) While citing references in the text, follow this style:

Single author publication: author's last name, year (do not include initials).
Two author publication: last name & last name, year (without initials).
Three or more author publication: first author's last name et al., year.

6) References: Should be listed in alphabetical order. Every reference cited in the text should be in the reference list (and vice versa). The title of the article, the volume number and first and last pages should be cited.
7) Journal titles should be abbreviated, e.g. Sanger, F. & Coulson, A. R. (1975). A rapid method for determining sequences in DNA by the primed synthesis with DNA polymerase. J. Mol. Biol. 94, 441-448.
Articles in books should include the title of the article, the name of the book, editor(s), edition number, first and last page numbers, the name and the location of the publisher; e.g. Hanks, S. K. & Hunter, T. (1995). The eukaryotic protein kinase superfamily. In The Protein Kinase FactsBook: Protein-Serine Kinases (Hardie, G. & Hanks, S., eds), pp. 747, Academic Press, London.

Utmost care should be taken to verify the accuracy of citation of references and sources of figures and tables. Be aware that reproducing text or tables or figures without permission is legally prohibited.
Now that you have ample knowledge of registrations @iitb, Let's shift our focus to URA.