

**Department of Electrical Communication Engineering**  
**Project Allotment Procedure for M.Tech. (ECE) Students**

November/December 2021

1. ECE office will send out an email to all faculty members requesting them to submit to ECE office the list of possible projects. The deadline for this will be 11:59pm on 13<sup>th</sup> November 2021. Although there may be an upper limit to the number of students allotted to each faculty, they are encouraged to list as many projects (and mention the total number of students) as they wish to take up during the academic period.
2. ECE Office will announce the list of projects on 15<sup>th</sup> November 2021. Students are encouraged to meet (in person or online) faculty members who have announced projects in their stream. Faculty will be requested to conduct online sessions for briefing students on the projects they have offered. The links to these sessions will be shared by email or will be put up on the [ECE Dept. sharepoint site](#).
3. A link to a Google form for indicating project preferences will be sent to all students. Students should submit their preferences form by 30<sup>th</sup> November 2021. Students are required to give a list of at least SIX faculty members (in order of preference) who have announced projects in their stream. Students must inform, in advance, each of the faculty members on their list, of their intention to list them as a preferred guide.
4. A link to a Google form for indicating student preferences will be shared with all faculty members. Those who are interested in taking students should fill and submit this form by 30<sup>th</sup> November 2021.
5. If the faculty member does not send his/her list of preferred students, or the list is insufficient, then projects announced by him/her will become non-operational.
6. Students will be allotted guides based on the preference lists given by faculty and students (see the project allocation algorithm). Although maximum efforts would be made to satisfy the interests of faculty and students, the best possible match between students and projects may not be guaranteed.
7. The Project Allotment Committee will prepare a tentative list of matchings by 6<sup>th</sup> December 2021. The Chairman, ECE Dept, may convene a faculty meeting subsequently to ratify the allotments and to decide on situations that require special considerations.
8. The final project allotments will be announced on or before 13<sup>th</sup> December 2021. The decision of the faculty meeting will be binding on all students and faculty participating in the procedure.

**Department of Electrical Communication Engineering**  
**Project Allotment Algorithm for M.Tech. (ECE) Students**

December 2021

Round 1

- **Step 0:** Randomly pick a student.
- **Step 1:** Look up the faculty member listed as the student's first preference. If the student appears on top of that faculty member's list, the match is made. In this case, mark the student as "ALLOCATED".
- If a faculty member gets ONE M.Tech. (C&N) student, either as the sole guide or as a co-guide, at any stage of Round 1, (s)he goes out of further contention in this round.
- In the event that the faculty member who is the student's first preference has not listed the student at all, the student's second preference is upgraded to become his/her first preference, This upgradation is also done in the event that the student's first preference has already gone out of contention in Round 1. In all other cases, the student goes back into the stack.
- Whenever an upgradation happens, a match as in Step 1 is attempted. If a match is made, mark the student as "ALLOCATED".
- Round 1 is kept operational until either all students are marked as "ALLOCATED" or the allotment process reaches a deadlock.

Round 2

- In this round, all faculty members who have offered projects are brought back in contention, including those who were allocated students in Round 1 (provided that they seek more than one student).
- Faculty and student preference lists are updated as follows. Students allocated in Round 1 are removed from all faculty members' lists. Students unallocated in Round 1 have their faculty preference lists restored to their initial states, as they were at the beginning of Round 1.
- A matching procedure as in Round 1 is executed, this time allowing each faculty member to be allocated a combined total (over Rounds 1 and 2) of TWO M.Tech. (C&N) students.
- Round 2 is kept operational until either all students are marked as "ALLOCATED" or the allotment process reaches a deadlock.

Round 3

- In Round 3, a best effort will be made to allocate students to those faculty members who have offered a project, but who were not allocated any students in Rounds 1 and 2. This will be done solely on the basis of the lists provided by the students and faculty. In this round, a match will be made between a faculty member and a student ONLY IF each appears on the other's list.
- Faculty can write "ANY STUDENT" in their list to maximize their chances of being allocated a student.

Round 4

- If, at the end of Rounds 1-3, there are any unallocated students still left, they will be encouraged to talk to faculty members to find a suitable project guide. The allocation of projects in these cases is finally at the discretion of the ECE Department Chair, based on a mutual understanding between the concerned students and faculty.