

EE UG Guidelines & FAQs

Y21 and earlier batches:

General instructions:

- Since the add-drop for the 2024-25-II semester is going on, this is a gentle reminder to carefully calculate your total credits completed at IITK manually and check whether they fulfill the necessary degree (BT/BS/DM/DD) graduation requirements.
- Apart from overall graduation requirements, ensure that the individual credit requirements of IC/DC/DE/ESO-SO/HSS/OE/UGP are also fulfilled. The institute only allows a waiver of 1 credit in the ESO-SO and OE categories, as mentioned in the UG manual. In case you have a deficit of more than 1 credit, you are advised to fulfill the deficit in the final semesters itself. Note that the 1 credit waiver is only in the specific category and that you still need to satisfy the overall graduation credit requirements.
- Kindly ignore the wrong course type detail available in the Pingala grade sheet as course type will be corrected through manual process for all the graduating students according to their course template after final semester. Therefore, it is suggested to map all your courses as per the template manually and register for remaining courses in the ongoing add-drop for the 2024-25-I semester. In case a student has a doubt or is unable to decide the course type of a course, s/he is advised to contact the UG office for the same.

Template Queries (Y21 and earlier batches):

UGP [y21]

- Template:
 - *Out of 18 credits for UGP-2 (EE392A) and UGP-3 (EE491A) only 09 credits may be added as OE credits (where the other 09 may be added as DE credits) OR all 18 maybe added as DE credits.*
 - *UGP-1 (EE391A [04]) & UGP-4 (EE492A [09]) are optional and do not count towards degree requirements.*
- UGP 1-4 (EE391A EE392A EE491A EE492A) CANNOT be used to fulfill DE/OE credit requirements, and those can be fulfilled only via courses. UGP 2-3 credits can be replaced with DE/OE courses in addition to the minimum DE/OE credit requirements.

- A minimum of 36 DE credits & 54 OE credits has to be completed, and if UGP not opted, can be replaced with more DE/OE credits.
- Overall combinations allowed: 2 UGP / 1 UGP 1 DE / 1 UGP 1 OE / 2 DE / 1 DE 1 OE (considering all to be 9 credit courses). All possible combinations allowed with only the restriction that OE credit replacement cannot be more than 09
- Procedure to take UGP:
 - UGP can be done alone or in a team of max 2
 - EE Department allows UGP in same or different department
 - If UGP is under Professor of EE dept., [UGP Form](#) needs signature of only 1 professor (i.e. the UGP supervisor)
 - If UGP is under Professor of different dept., [UGP Form](#) needs signature of the UGP supervisor and a supervising professor from EE department
 - Submit the [UGP Form](#) in EE Office / Convener's Office atleast a day before add-drop deadline (You may also forward the approval mail of supervising professor to get the course request accepted)
 - Request for EE UGP course on Pingala. [DUGC Convener](#) accepts this as a course request for the semester (if 2 members, then both the team members need to request the course individually)

Department Electives [y21]

- A minimum of 36 credit DE needs to be completed in the form of courses (and NOT EE UGP).
- Out of the 36, 18 credits (2*9) has to be compulsorily from the Basket-A, offered only in even semesters
 - EE301A, EE311A, EE321A, EE360A
- Students are advised to complete the basket DEs in the 6th semester itself and not wait for the 8th semester.
- The remaining 18 credits can be from the basket or outside the basket from any non-compulsory EE courses (These CANNOT be the EE UGP courses)
- DE, if done extra, can be converted to OE credits as well. This is done at the end of graduation by the DoAA office.

Open Electives

- A minimum of 54 OE credits needs to be completed in the form of courses
- OE can be from any department (including EE department). If any EE course is requested as OE / DE, they can be interchanged at the time of graduation to fulfill respective DE/OE credits.
- Course type "Minor" on Pingala also counts as OE credits (considering it to be from a different department)

ESO-SO [y21]

- Total of 44 ESO-SO credits are required, out of which 36 are from compulsory courses (MSO202B, MSO202B, MSO201A, ESO203A) [Y21 and previous batches]
- 8 or more ESO-SO credit course has to be done from the ESO-SO basket

HSS [y21]

- 18 credits of level-1 HSS and 27 credits of level-2 HSS need to be completed
- Lottery for HSS2 opens only before pre-registration of sem 6,7,8 (for Y21 and earlier batches) which should not be missed
- Students are strongly discouraged from dropping or messing around with HSS template, as it may lead to degree extensions
- If a student missed the HSS lottery, it is the responsibility of the student to request and complete the credits by requesting a professor. DUGC Convener is not responsible to allot any HSS to the student in such case

Failed or Fresh Backlogs / Warning / Academic Probation [y21]

- Semester credit limits [min, max]:
 - WR: [35, 49]
 - AP/AP*: [27, 38]
- A common mistake:
 - A student registers for only 36 credits in sem 7 and fails to clear 1 course. The semester credits falls below 30 (i.e. 27) and the student is put to Warning Status for semester 8, where they can only register for a maximum of 49 credits. Students are advised to plan template accordingly. [refer to chapter 9 of [UG Manual](#) for WR/AP rules]
- Student is advised to seek assistance from [DUGC Convener](#) or DUGC Student Nominees for guidance in template planning
- Failed OE/DE/HSS/EME/ESO-SO (non-compulsory) can be substituted with any other new or previously cleared OE/DE/HSS/EME/ESO-SO
 - Failed as well as fresh backlog students in HSS/EME are permitted to be part of HSS / EME lottery allotment
 - Also the substitute mapping can be done while requesting a new course as substitute during pre-reg or add-drop
 - Or at the time of graduation with a previously cleared course, but student should ensure that they have cleared minimum credits of respective bucket for graduation
- Requesting a course as substitute to a failed backlog assists in removing the effect of E/F grade in CPI, if cleared the following time
- Fresh backlogs are the courses not cleared as per template (dropped initially or during the semester)

Dual Degree [y21]

- Applications are called at end of sem 5, 6, 7
- For Dual Degree template refer to [Course-Template-B.Tech-BS.pdf \(iitk.ac.in\)](#) (page 28)
- 36 OE credits from parent department can be waived off to cover Double Major requirements.
- Students are not permitted to take UGP 3 & 4 as part of UG curriculum after BT-MT conversion (It cannot be taken up as PG DE also since UGP comes under UG template)

Double Major [y21]

- Applications are called at the end sem 4 & 7
- For Double Major template refer to [Course-Template-B.Tech-BS.pdf \(iitk.ac.in\)](#) (page 29)
- 36 OE credits from parent department can be waived off to cover Double Major requirements.
- *The second Major part of the program will be discontinued at the end of the 8th sem if the student is short by 30 credits or more, of completing the parent department graduation requirement, or his/her CPI falls below 6.0*
[REFER [Double-Major.pdf \(iitk.ac.in\)](#)]
- *[12] Credits for the courses listed under 'Pre-requisites' in the Double Major template are NOT counted towards the minimum graduation credit requirement for the Double Major. Students are expected to use their UG elective slots and/or extra credit opportunities in each semester to fulfill these pre-requisites in timely fashion*
[REFER [Course-Template-B.Tech-BS.pdf \(iitk.ac.in\)](#)]
- Pre-requisites need to be completed as pre-requisite of Double Major in EE, irrespective of them being a pre-requisite of any Double Major compulsory course. (i.e. ESO203A, MSO202A, MSO203B, MSO201A has to be completed)
- If student has already done HSO201A as part of their parent department, student should contact [DUGC Convener](#) for MSO201A waiver from Double Major.

Misc

- Semester credit load in a semester should be between 35 and 65
- A student in the final semester or an extended degree student may register for credits less than the minimum credit limit if (i) only those many credits are required for the completion of academic programme or (ii) if any course(s) is/are not being offered in the concerned semester
- Students can register for extra courses for knowledge purposes (both within 65 credits and beyond 65 credits) with S/X grade or Letter-grade, that does not count for degree requirements. Refer to section 6.1.5.1 of [UG Manual](#) for overload details.
- Pass grades CANNOT be repeated to improve grades
- It is advised to verify course content overlap with the [DUGC Convener](#) before requesting courses with a lot of similar content (E.g. MSO201 & HSO201 counts as only 1 course towards graduation credits)

Template Queries (Y22 onwards)

UGP [y22+]

- UGP 1-2 (EE496, EE497) CAN be used to fulfill DE credit requirements.
- A minimum of 27 DE credits (total of 45 DE credits) has to be completed, and if UGP not opted, can be replaced with more DE credits only (not OE)
- Overall combinations allowed: 2 UGP / 1 UGP 1 DE / 2 DE (considering all to be 9 credit courses)
- [Procedure to take UGP](#)

Department Electives [y22+]

- A total of 45 credit DE needs to be completed.
- A minimum of 27 credit DE needs to be completed in the form of courses (and NOT EE UGP). Remaining 18 credits (45-27) can be DE courses or UGP.
- Out of the 27, 18 credits (2*9) has to be compulsorily from the Basket-A, offered only in even semesters:
 - *EE301, EE311, EE321, EE360*
- Students are advised to complete the basket DEs in the 6th semester itself and not wait for the 8th semester.
- DE, if done extra, can be converted to OE credits as well. This is done at the end of graduation by the DoAA office.

Open Electives

- Refer [OE above](#)

ESO-SO [y22+]

- Total of 42 ESO-SO credits are required, all are from compulsory courses (MSO202m, MSO202m, MSO201, ESO203, TA211, TA212)
- Further ESO-SO courses maybe taken up as OE (not compulsory)
- If other ESO-SO courses are already taken up as ESO-SO, they can be used to map as and fulfill OE credits at the time of graduation

HSS / EME [y22+]

- 09-11 credits of level-1 HSS, 09-11 credits of EME, and 27 credits of level-2 HSS need to be completed
- Lottery opens as mentioned below (Y22 onwards) which should not be missed
 - HSS1 before sem 3 EME before sem 4 HSS2 before sem 5, 7, 8
- Students are strongly discouraged from dropping or messing around with HSS/EME template, as it may lead to degree extensions

- If a student misses the HSS/EME lottery, it is the responsibility of the student to request and complete the credits by requesting in pre-reg / add-drop. DUGC Convener is not responsible to allot any HSS/EME to the student in such a case.
- Failed as well as fresh backlogs in HSS / EME are eligible for upcoming lottery allotment

Pre-requisites:

- Branch Changed to EE: Student only needs to complete PHY113 in sem 3/4/5/summers as pre-requisite to EE340 (sem 6). Clearing PHY114 for previous non-EE student is NOT required, if already not done
- Pre-requisite waiver if any, has to go through [DUGC Convener](#) and course instructor
- Some common pre-requisites (depends on the professor and semester too):
 - EE200 -> EE301
 - **EE200 -> EE320** -> EE321
 - ESC201 -> EE360
 - EE210 -> EE311
 - **ESC201 + ESO203 + EE210 + EE250 -> EE380**
 - **EE380 -> EE381**
- MSO202m, MSO203m, MSO201 (all compulsory) are NOT pre-requisite to any courses

Dual Degree / Double Major

- *To be updated soon*

B.Tech. with Honors

- *To be updated soon*

Misc

- Refer [Misc above](#)

For further queries, please get in touch with the [DUGC Convener](#) or Student Nominees: [Amay Raj](#) | [Ritik Shah](#)

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This doc is maintained by [Amay Raj](#), EE DUGC Student Nominee 23-24. It is only for guidance and assistance for frequently asked questions. The owner will not be responsible for any repercussion in decision regarding any information conveyed here. Kindly refer to respective documents for seeking detailed clarification or contact [DUGC Convener](#)

Kindly report any discrepancies to the student nominees.

References:

[UG-Manual.pdf \(iitk.ac.in\)](#) | [Course-Template-B.Tech-BS.pdf \(iitk.ac.in\)](#) | [Double-Major.pdf \(iitk.ac.in\)](#)