

Guru Nanak Dev Engineering College, Ludhiana
An Autonomous College under UGC Act 1956
(Academic Section)

No. AS/81/2726

Date: 17.07.2026

CIRCULAR

List for Open Electives to be opted by students of B.Tech. 5th Semester of Batch 2024-28 under Scheme Code-2024 for Session July-Dec, 2026 is enclosed herewith. Following are the important guidelines for students:

1. Any number of 12-week courses can be opted from the list enclosed which shall be considered as 'Open Elective-I/Open Elective-II/Open Elective-III', if qualified and consent will be taken from students as per the **process** listed below. Upon successful completion of the courses, the student will be exempted from attending 'Open Elective-I/II/III' courses when offered later in classroom teaching mode as per study scheme.

Process: There will be flexibility given to the students so that they can choose which of the successfully qualified NPTEL courses should be considered as Open Elective-I, II, III for their B.Tech. Programme. For this case, consent will be taken from students as per following timeline:

- (i) For Open Elective-I, consent will be taken before the start of 6th Sem for NPTEL courses successfully qualified by them during 3rd Sem to 5th Sem.
- (ii) For Open Elective-II and III, consent will be taken before the start of 7th Sem (if students have to undergo six month training in 8th Sem) and before the start of 8th Sem (if students have undergone six month training in 7th Sem) for NPTEL courses successfully qualified by them during 3rd Sem to 6th Sem.
- (iii) In case students have qualified NPTEL courses, but are not satisfied with the grades and they do not wish any of these to be considered as OE-I/OE-II/OE-III, in such case, they can opt for classroom teaching also in 6th/ 7th/ 8th Semester as per study scheme of department.

Student should ensure whether his/her program is mentioned under 'Applicable UG Engg. Program' before enrolling for NPTEL course.

2. In the list enclosed, if any NPTEL course is being re-run in this session also; it can be opted by students, only if he/she wishes an improvement in grades or he/she has failed previously. Otherwise, enrolment in this course will be considered null. As an example, course "Introduction to Industry 4.0 and Industrial Internet of Things (noc26-cs160)" is being re-run in this session also and was also offered in previous sessions July-Dec, 2025 as well as Jan-June, 2026.
3. Parent department will collect the information of students who enrolls in these courses such as NPTEL Roll No., NPTEL email as a proof etc.
4. On successfully qualifying the online course, student should submit a self-attested copy of final certificate issued by NPTEL to the parent department. Respective department and SPOC, Swayam-NPTEL Local Chapter of GNDEC shall verify the certificate.
5. Percentage scored in NPTEL Online Certification Exam will be mapped to End Sem Exam (ESE) Marks (i.e. out of 100 marks) and then to respective grades, hence '3' credits will be transferred for each 12-week course and considered as per study scheme of respective department. Grades

obtained in NPTEL courses will be considered towards B.Tech. Programme, only if the course is successfully qualified and obtained atleast 40% qualifying criteria as per College Examination rules. Moreover, there will be a provision of classroom teaching as per study scheme for the students, who wouldn't be able to qualify through Swayam-NPTEL platform. Evaluation of courses taught in classroom will be same as per existing method of assessment.

6. Steps for enrolling and registering in NPTEL course are given below (An example is shown here):

(i) Go to the Course URL given in the list enclosed and click on 'Join'.

The screenshot shows the NPTEL website interface. At the top, the URL is https://onlinecourses.nptel.ac.in/noc25_ee157/preview?user_email=.... The page title is "Analog Electronic Circuits - IITKGP" by Prof. Pradip Mandal, IIT Kharagpur. A "Join" button is visible, along with "Learners enrolled: 1867" and "Exam registration: 31". Below this, there is a video player showing a thumbnail of Prof. Pradip Mandal. To the right of the video player is a "Summary" section with the following details:

Summary	
Course Status :	Upcoming
Course Type :	Core
Language for course content :	English
Duration :	12 weeks
Category :	- Electrical, Electronics and Communications Engineering - Control and Instrumentation

(ii) Update Profile i.e. Personal Details and Education Details. It is mandatory for student to select GNDEC as Swayam Local Chapter, fill college details as given below. Kindly note that '**University Roll Number**' is to be filled in section 'College/School Roll No.'. Then, 'Update Profile and Join Course'.

Education Details

Part of a SWAYAM local chapter? * ⓘ

Yes

If you are a student/faculty in a college, go to [here](#) and check if your college is an SWAYAM Local Chapter

Local Chapter State *

Punjab

College Name *

GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA, PUNJAB

Tip: Start typing your City or College name for automatic filtering

University Name *

I K Gujral Punjab Technical University, Jalandhar, Kapurthala, PUNJAB

Tip: Start typing your University name for automatic filtering

College/School Roll No. *

Degree * ⓘ

BTech

Department * ⓘ

Electronics and Communication Engineering

Study Year * ⓘ

2nd Year

☐ I agree to SWAYAM [Terms of Service](#).
☐ I agree to follow the [Honor Code](#).

We've updated our form, please ensure all the required fields have been filled properly to activate the "Update Profile and join course" button.

UPDATE PROFILE AND JOIN COURSE
CANCEL

- (iii) Student will get an email confirming the course enrolment. Afterwards, he/she can start attending the course week wise. Student will have to fulfill the eligibility and qualification criteria as per NPTEL course guidelines from time to time.
- (iv) As per timeline notified by NPTEL, student has to do registration for enrolled course for appearing in the exam; 'Click to register for Certification Exam'.

https://onlinecourses.nptel.ac.in/noc25_ee157/announcements?force=true#registration_confirmation




NPTEL » Analog Electronic Circuits - IITKGP

Announcements About the Course Q&A Progress Mentor Review Assignment

Click to register for Certification exam

If already registered, click to check your payment status

Course outline

About NPTEL
How does an NPTEL online course work?
WEEK 0

There are new announcements since your last visit. Please have a look.

Feedback on NPTEL Translation and Transcripts!!

2025-07-14

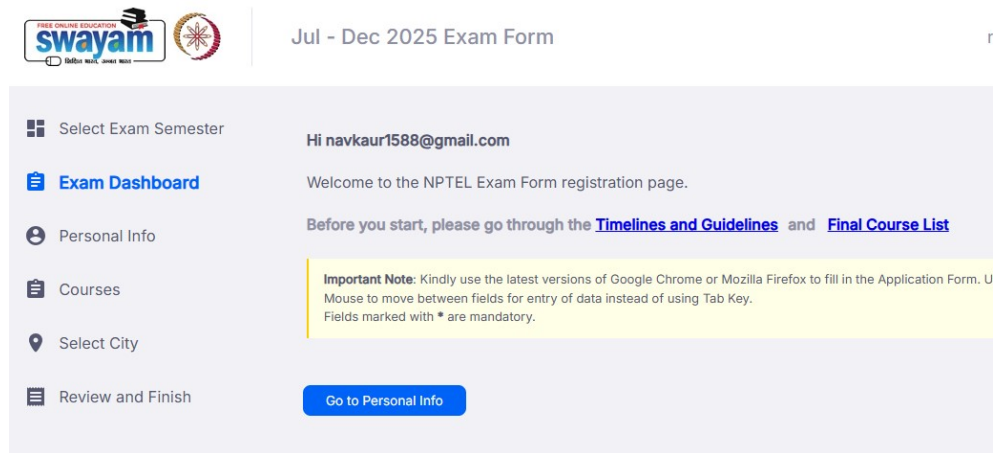
Dear Learners,

Do you find the English difficult to follow in the NPTEL course?
Would it be easier and help you if the videos had subtitles in Indian languages?

We have great news for you! The videos in this course have been translated into Hindi, Telugu

But how do you change the subtitles? Follow the steps below.

- (v) On 'Exam Dashboard', Go to 'Personal Info', fill the required information.



swayam

Jul - Dec 2025 Exam Form

Select Exam Semester

Hi navkaur1588@gmail.com

Exam Dashboard

Welcome to the NPTEL Exam Form registration page.

Personal Info

Before you start, please go through the [Timelines and Guidelines](#) and [Final Course List](#)

Courses

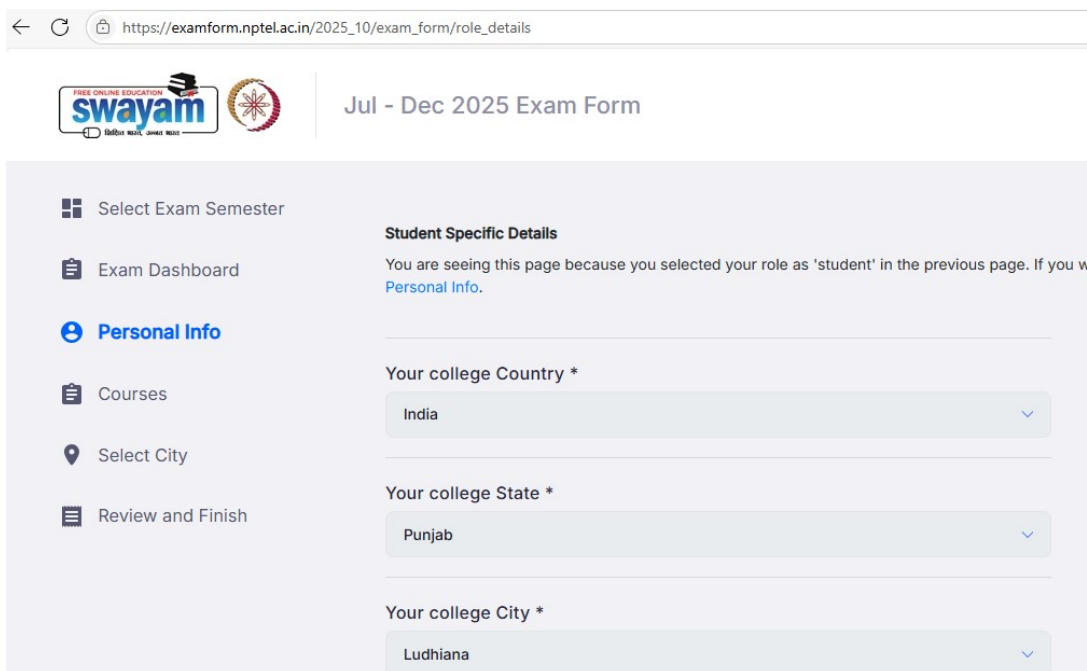
Important Note: Kindly use the latest versions of Google Chrome or Mozilla Firefox to fill in the Application Form. Use Mouse to move between fields for entry of data instead of using Tab Key. Fields marked with * are mandatory.

Select City

Review and Finish

[Go to Personal Info](#)

- (vi) Fill 'Student Specific Details' i.e. College Name, Degree, Department, Year of Study, APAAR/ABC ID etc. **Student has to tick 'Yes', when asked about sharing scores with college.**



swayam

Jul - Dec 2025 Exam Form

Select Exam Semester

Exam Dashboard

Personal Info

Courses

Select City

Review and Finish

Student Specific Details

You are seeing this page because you selected your role as 'student' in the previous page. If you want to change your role, click on [Personal Info](#).

Your college Country *

India

Your college State *

Punjab

Your college City *

Ludhiana



(vii) 'Add Course' for payment; select 'Exam Date' and 'Exam Cities'. Further 'Confirm and Pay'. Pay Applicable Exam Fee.



FREE ONLINE EDUCATION

swayam

सत्यमेव जयते



Jul - Dec 2025 Exam Form



Select Exam Semester



Exam Dashboard



Personal Info



Courses



Select City



Review and Finish

Important Note: Selected Exam Date is subjected to change based on seat availability. You can check final Exam Date on your hall ticket.

Analogue Electronic Circuits - IITKGP

Selected Exam Date: Sunday, November 02, 2025

[Add Exam City And Proceed To Pay](#)

[Info](#)

[Remove](#)

[+ Add Course](#)

[Select Exam Cities](#)

← → ↻ https://examform.nptel.ac.in/2025_10/exam_form/exam_center?action=select



Jul - Dec 2025 Exam Form

Select Exam Semester

Exam Dashboard

Personal Info

Courses

Select City

Review and Finish

Select ExamCity Edit

Analog Electronic Circuits - IITKGP: Sunday, November 02, 2025

Price: ₹ 1000

First Preference

Punjab

Ludhiana

First Preference City Pincode

141013

Second Preference

Punjab

Jalandhar

Third Preference

If exam city choices 1 and 2 are not available, you will be allotted to this 3rd choice exam city. Please choose this exam city very carefully.

Punjab

Chandigarh/Moha

Confirm and pay

Note: If student does not share information with GNDEC Swayam-NPTEL Local Chapter at any step while enrolling or registering for the course, then the course shall not be considered by the college.

- Student must keep visiting NPTEL official website <https://onlinecourses.nptel.ac.in/> for updated information.
- Kindly note that the aforementioned steps may be subject to change based on NPTEL's specific procedures. So, the student must register carefully.

Encl: List of Open Electives offered through Swayam-NPTEL platform for B.Tech. 5th Semester of Batch 2024-28 under Scheme Code-2024 for Session July-Dec, 2026.

Sd/-

AR (Academics)

Cc: (i) Principal- for information, please, (ii) All HoDs (UG Engineering), (iii) Dean Academics- for information, please. (iv) SPOC-Swayam NPTEL Local Chapter, (v) Mr. Ajay Verma- for uploading on Notice Board, (vi) Dealing Hand- Ms. Satwinder Kaur

GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA

List of Open Electives offered through Swayam-NPTEL Platform for B.Tech. 5th Semester of Batch 2024-28 (Scheme Code-20240 for July-Dec, 2026)								
S. No.	Course Id	Course Name	Institute	Course URL	Offering Dept.	Applicable UG Engg. Programs	Course Start Date	Course Enrolment Last Date*
1	noc26-ce121	Sustainable Groundwater Management	IIT Madras	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_ce121	CE	CSE, EE, ECE, IT, ME	20-Jul-26	27-Jul-26
2	noc26-ce161	Fire Protection, Services and Maintenance Management of Building	IIT Delhi	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_ce161	CE	CSE, EE, ECE, IT, ME	20-Jul-26	27-Jul-26
3	noc26-ce162	Sustainable Materials and Green Buildings	IIT Delhi	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_ce162	CE	CSE, EE, ECE, IT, ME	20-Jul-26	27-Jul-26
4	noc26-me151	Fundamentals of Manufacturing Processes	IIT Roorkee	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_me151	ME	CE, CSE, EE, ECE, IT	20-Jul-26	27-Jul-26
5	noc26-me149	Work System Design	IIT Roorkee	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_me149	ME	CE, CSE, EE, ECE, IT	20-Jul-26	27-Jul-26
6	noc26-me156	Introduction to Composites	IIT Kanpur	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_me156	ME	CE, CSE, EE, ECE, IT	20-Jul-26	27-Jul-26
7	noc26-cs183	Introduction to Application of Artificial Intelligence to Robotics	IIT Roorkee	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_cs183	ME	CE, EE, ECE, IT	20-Jul-26	27-Jul-26
8	noc26-me193	Industrial Engineering and Operations Research	IIT Guwahati	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_me193	ME	CE, CSE, EE, ECE, IT	20-Jul-26	27-Jul-26
9	noc26-ee99	Matrix Theory and Applications	IIT Hyderabad	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_ee99	EE	CE, CSE, ECE, IT, ME	20-Jul-26	27-Jul-26
10	noc26-ge80	Hydrogen Energy: Technology and Economics	IIT Roorkee	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_ge80	EE	CE, CSE, ECE, IT, ME	20-Jul-26	27-Jul-26

11	noc26-ee158	Economic Operations and Control of Power Systems	IIT Kanpur, MNIT Jaipur	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_ee158	EE	CE, CSE, ECE, IT, ME	20-Jul-26	27-Jul-26
12	noc26-cs153	Programming in Java	IIT Kharagpur	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_cs153	CSE	CE, EE, ECE, ME	20-Jul-26	27-Jul-26
13	noc26-cs161	Introduction to Internet of Things	IIT Kharagpur	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_cs161	CSE	CE, EE, ME	20-Jul-26	27-Jul-26
14	noc26-cs160	Introduction to Industry 4.0 and Industrial Internet of Things	IIT Kharagpur	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_cs160	CSE	CE, EE, ECE, ME	20-Jul-26	27-Jul-26
15	noc26-cs102	Foundations of Machine Learning	IIT Hyderabad	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_cs102	CSE	CE, EE, ME	20-Jul-26	27-Jul-26
16	noc26-cs150	Cloud Computing	IIT Kharagpur	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_cs150	CSE	CE, EE, ECE, ME	20-Jul-26	27-Jul-26
17	noc26-ee135	Analog Electronic Circuit	IIT Delhi	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_ee135	ECE	CE, CSE, IT, ME	20-Jul-26	27-Jul-26
18	noc26-ee178	Digital Image Processing	IIT Kharagpur	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_ee178	ECE	CE, EE, ME	20-Jul-26	27-Jul-26
19	noc26-ee190	Microwave Engineering	IIT Guwahati	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_ee190	ECE	CE, CSE, EE, IT, ME	20-Jul-26	27-Jul-26
20	noc26-cs131	Software Testing	IIIT Bangalore	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_cs131	IT	CE, EE, ECE, ME	20-Jul-26	27-Jul-26

* Visit NPTEL official website for updated Information: <https://onlinecourses.nptel.ac.in/>