

**Guru Nanak Dev Engineering College, Ludhiana**  
**Department of Computer Science and Engineering**

**Notice for Minor Engineering Degree**

The students of branches other than B.Tech. (CSE) can opt for minor engineering degree as per the following guidelines.

1. The students can earn 8 credits out of total 20 credits through MOOCs. The remaining 12 credits have to be earned through class room teaching.
2. List of subjects for session Jan-May, 2020 which can be opted through MOOCs are as following:

Course id	Course Name	Institute	Duration of Course	Weblink to join the course
noc20-cs08	Programming in Java	IIT KGP	12 weeks	<a href="https://swayam.gov.in/nd1_noc20_cs08/preview">https://swayam.gov.in/nd1_noc20_cs08/preview</a>
noc20-cs35	The Joy of Computing using Python	IIT Ropar	12 weeks	<a href="https://swayam.gov.in/nd1_noc20_cs35/preview">https://swayam.gov.in/nd1_noc20_cs35/preview</a>
noc20-cs53	An Introduction To Programming Through C++	IITB	12 weeks	<a href="https://swayam.gov.in/nd1_noc20_cs53/preview">https://swayam.gov.in/nd1_noc20_cs53/preview</a>
noc20-cs03	Introduction to Database Systems	IITM	12 weeks	<a href="https://swayam.gov.in/nd1_noc20_cs03/preview">https://swayam.gov.in/nd1_noc20_cs03/preview</a>
noc20-cs10	Introduction to algorithms and analysis	IIT KGP	12 weeks	<a href="https://swayam.gov.in/nd1_noc20_cs10/preview">https://swayam.gov.in/nd1_noc20_cs10/preview</a>
noc20-cs37	Discrete Mathematics	IIT Ropar & IIT Bhilai	12 weeks	<a href="https://swayam.gov.in/nd1_noc20_cs37/preview">https://swayam.gov.in/nd1_noc20_cs37/preview</a>
noc20-cs04	Operating System	IITD	12 weeks	<a href="https://swayam.gov.in/nd1_noc20_cs04/preview">https://swayam.gov.in/nd1_noc20_cs04/preview</a>
noc20-cs29	Introduction to Machine Learning	IITM	12 weeks	<a href="https://swayam.gov.in/nd1_noc20_cs29/preview">https://swayam.gov.in/nd1_noc20_cs29/preview</a>
noc20-cs42	An Introduction to Artificial Intelligence	IITD	12 weeks	<a href="https://swayam.gov.in/nd1_noc20_cs42/preview">https://swayam.gov.in/nd1_noc20_cs42/preview</a>
noc20-cs11	Deep Learning (IITKGP)	IIT KGP	12 weeks	<a href="https://swayam.gov.in/nd1_noc20_cs11/preview">https://swayam.gov.in/nd1_noc20_cs11/preview</a>
noc20-cs25	Computer Architecture	IITD	12 weeks	<a href="https://swayam.gov.in/nd1_noc20_cs25/preview">https://swayam.gov.in/nd1_noc20_cs25/preview</a>
noc20-cs13	Compiler Design	IIT KGP	12 weeks	<a href="https://swayam.gov.in/nd1_noc20_cs13/preview">https://swayam.gov.in/nd1_noc20_cs13/preview</a>
noc20-cs22	Introduction to internet of things	IIT KGP	12 weeks	<a href="https://swayam.gov.in/nd1_noc20_cs22/preview">https://swayam.gov.in/nd1_noc20_cs22/preview</a>
noc20-cs23	Computer Networks and Internet Protocol	IIT KGP	12 weeks	<a href="https://swayam.gov.in/nd1_noc20_cs23/preview">https://swayam.gov.in/nd1_noc20_cs23/preview</a>
noc20-cs32	Social Networks	Punjab Engineering College & IIT Ropar	12 weeks	<a href="https://swayam.gov.in/nd1_noc20_cs32/preview">https://swayam.gov.in/nd1_noc20_cs32/preview</a>
noc20-cs02	Foundations of Cryptography	IIT Bangalore	12 weeks	<a href="https://swayam.gov.in/nd1_noc20_cs02/preview">https://swayam.gov.in/nd1_noc20_cs02/preview</a>
noc20-cs21	Cryptography and Network Security	IIT KGP	12 weeks	<a href="https://swayam.gov.in/nd1_noc20_cs21/preview">https://swayam.gov.in/nd1_noc20_cs21/preview</a>

3. The credits earned in Minor engineering will not be considered for honour degree.
4. Passed out students can also avail the option of pursuing minor degree in the concerned subject, however the degree must be completed within stipulated period as notified by IKGPTU for the completion of the B.Tech.
5. The allotted number of seats for minor engineering degree in Computer Science and Engineering are 50 and allotment will be done on merit basis.
6. The students must enrol on the web link mentioned along with the course latest by 27<sup>th</sup> January, 2020.
7. The duly filled performa (available on departmental web link) forwarded by head of the parent department must be submitted in CSE department by 30<sup>th</sup> January, 2020. The results of 1<sup>st</sup> and 2<sup>nd</sup> semester should be attached with the performa.