

ROADMAP FOR ELECTRICAL ENGINEERING CORE PLACEMENTS:

Introduction:

The following roadmap is divided into 6 weeks. Proper preparation according to the schedule given below will help you grab a career in core engineering easily.

Week 1 and 2:

This week will be dedicated to the revision of second year courses for UG Students and equivalent analog circuit courses for PG students.

ESC201 - Introduction to Electronics and EE210- Microelectronics - I are the basics courses for Analog and Digital Electronics placement. Revision of these courses are very important.

EE200 - Signal systems and networks and EE250 - Control systems and analysis is a basic course on signal processing and questions can be asked in interview.

ESO203 - Introduction to Electrical Engineering - is an introductory course to power systems and is a vital course for career in Power engineering

The following playlist contains the videos of Dr. Baquer Mazhari for ESC201. It covers topics from Thevenin, Norton equivalent circuits to opamps to transistors in analog electronics and Counters, Clocks, Flip flops in digital electronics.

<https://youtube.com/playlist?list=PLTFMW-rP7fuqMiK174et4SKbbMKd4VjdU>

EE210 has covered MOSFETs in all aspects. Given below is the link of Dr. Imon Mondal's lectures on MOSFETs.

https://youtube.com/playlist?list=PLP-rjhz_nli4ltS8toqSGlhwpp7n4hvjJi

Concepts of machines are very important for interviews. ESO203 lays a strong foundation for machines. The following slides and playlist for Dr. Sandeep Anand will help you.

https://youtube.com/playlist?list=PLRU_w6H3xAm67fhJ88oX2z07-AgEv1eYf

SLIDES: <https://drive.google.com/drive/folders/18qLkD7Ly260bzjAxm-e3lslfG4dV68yz>

Revision of network theory can be done from the following playlist.

https://youtube.com/playlist?list=PLbMVogVj5nJQQZbah2uRZIRZ_9kfoqZyx

Revision of Control System analysis can be done through the following video lectures:

https://youtube.com/playlist?list=PLWPirh4EWFpGpH_Rb6Q4iQ6vGGRA6MORZ

Week 3:

Studying EE370 is important for Digital Profile of core companies.

Revision of PG courses like EE698I, EE604A, EE610A done upto 6th semester will be helpful.

For advanced Digital IC designs Prof. Janakiraman's lectures can be used.

<https://youtube.com/playlist?list=PLHO2NKv71TvsSqYwVvUCZwNkY-jUyUHdS>

For analog IC design, NPTEL lectures of Prof. Nagendra Krishnapura can be followed.

<https://nptel.ac.in/courses/117106030>

Week 4:

For Embedded Systems, Revision of ESC101A will be helpful.

Programming/OOPS concepts like class/inheritance will be helpful.

You can refer to OOPs from the following link.

<https://www.tutorialspoint.com/basic-concepts-of-object-oriented-programming-using-cplusplus>

Week 5:

Verilog is a Hardware language and it is very important for interviews in core profile. Verilog can be revised/ learnt from the following playlist.

<https://youtube.com/playlist?list=PLUtfVcb-ign-EkuBs3arreiIxa2UKIChI>

Questions can be practised from the following Git repository.

<https://github.com/xiaop1/Verilog-Practice>