**Semester 1**

**Branch Code: EE?**

**M.Tech. in ELECTRICAL ENGINEERING**

**STREAM: MULTIMEDIA SIGNAL PROCESSING**

**2020 Batch**

**S.No Course No Course Name L T E P O C**

1 MTech core I^ 4 0 0 0 8 12

2 MTech core II^ 4 0 0 0 8 12

3 MTech core III^ 4 0 0 0 8 12

4 MTech core IV^ 4 0 0 0 8 12

**Total 16 0 0 0 32 48**

^ Total number of core credits must be at least 48. Core courses are to be taken from the following basket of core courses (courses can be added to this basket with HOD approval):

**No. Course No. Title L T E P O C**

 1 EE5110 Probability Foundations for Electrical Engineers 3 1 0 0 8 12

 2 EE5120 Applied Linear Algebra I for EE 4 0 0 0 8 12

 3 EE5130 Digital Signal Processing 4 0 0 0 8 12

 4 EE5175 Image Signal Processing 4 0 0 0 8 12

**Semester 2**

**S.No Course No Course Name L T E P O C**

1 Electives\*\* 0 0 0 0 0 0

**SUMMER**

**S.No Course No Course Name L T E P O C**

1 EE6901 Project I 0 0 0 0 25 25

**Semester 3**

**S.No Course No Course Name L T E P O C**

1 EE6902 Project II 0 0 0 0 30 30

2 Electives\*\*

**Semester 4**

**S.No Course No Course Name L T E P O C**

1 EE6903 Project III 0 0 0 0 30 30

**Total 30**

**Semester I II Summer III IV Total**

**Credits 48 0\*\* 25 30\*\* 30 190**

\*\* Indicated credits are only for core programme. In addition, 57 credits of electives have to be taken.

Of these 57 elective credits, 45 credits of electives have to be taken from Elec. Engg. (or equivalent) at the 5000 level or higher, and 12 credits can be taken in any department at the 5000 level or higher. All elective lab courses will also be eligible. Courses from the core basket can also be taken as electives after the minimum requirement for core courses are satisfied.

*The EE Department proposes to split the M.Tech project into two phases --- Project Phase-1 carrying 55-credits (to be carried out usually over the summer and the odd semester), and Project Phase-2 carrying 30-credits (to be carried out in the even semester).*

*Project Phase-1 is mandated for all students. On the other hand, Project Phase-2, which is the continuation of*

*Phase-1, can be pursued only if it is approved by the evaluation committee.*

*At the end of Project Phase-1, the student should submit a report and make a presentation. The committee will then recommend whether or not the student is eligible to pursue Project Phase-2. If the student is not found eligible, additional course work has to be done so as to meet the total credit requirements for obtaining the M.Tech degree.*

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The list of electives is:

 EE5170 Speech Signal Processing

EE5180 Machine Learning

EE4371 Data Structures and Algorithms

EE5176 Computational Photography

EE5332 Mapping Signal Processing Algorithms to DSP Architectures

EE6110 Adaptive Signal processing

EE6132 Advanced Topics in Signal Processing

EE???? Computer Vision

EE???? Deep Learning for Imaging