

<b>COURSE TITLE</b>	<b>TE142340: Discrete Mathematics and Graph Theory</b> Credits: 2 Semester: I
<b>LEARNING OBJECTIVES</b>	Students have the knowledge about data structures and algorithms, and also have the ability to use them in many classification and optimization problems.
<b>COMPETENCY</b>	<ul style="list-style-type: none"> <li>• Students understand basic concepts in discrete mathematics and graph theory.</li> <li>• Students can solve classification and optimization problems in graph.</li> </ul>
<b>SUBJECTS</b>	<ul style="list-style-type: none"> <li>• Logics, sets and functions.</li> <li>• Recursive algorithms and computational complexity.</li> <li>• Relations.</li> <li>• Tree.</li> <li>• Graph.</li> </ul>
<b>MAIN REFERENCES</b>	<ul style="list-style-type: none"> <li>• Rosen, <u>Discrete Mathematics</u>, Prentice Hall Inc, 1999.</li> <li>• Cormen T., Leiserson C., Rivest R., Stein C., <u>Introduction to Algorithms</u>, 2<sup>nd</sup> Edition, Mc Graw Hill international Edition, 2004.</li> </ul>
<b>OPTIONAL REFERENCES</b>	Selected papers from IEEE transactions.
<b>PREREQUISITE</b>	-