

COURSE TITLE	TE142486: Evolution and Genetic-based Computation Credits: 2 ELECTIVE COURSE
LEARNING OBJECTIVES	Students understand the concepts and have the ability to explain the techniques in evolution and genetic based computation.
COMPETENCY	<ul style="list-style-type: none"> • Students can explain the concepts and phenomenons in evolution and genetics based computation. • Students can explain the process of evolution and genetics based programming.
SUBJECTS	<ul style="list-style-type: none"> • Phenomenon of evolution and genetics based computation. • Simulation of the implementation of evolution and genetics based computation. • The use of point 1 and 2 for global optimization. • Evolution and genetics based programming.
MAIN REFERENCES	<ul style="list-style-type: none"> • A.E. Eiben , J.E. Smith , <u>Introduction to Evolutionary Computing (Natural Computing Series)</u> • Marco Tomassini, <u>Spatially Structured Evolutionary Algorithms: Artificial Evolution in Space and Time</u>
OPTIONAL REFERENCES	<ul style="list-style-type: none"> • Some papers about evolutionary algorithm from IEEE transactions for evolutionary algorithms and computing. • Some papers about evolutionary algorithm from IEICE Fundamentals on evolutionary computing.
PREREQUISITE	-