



MODULE HANDBOOK DESCRIPTION

Module designation	Radar and Remote Sensing	
Code	FBC0006	
Semester(s) in which the module is taught	6 / third year	
Person responsible for the module	Cahyo Mustiko Okta Muvianto, ST., Msc., Ph.D	
Language	Indonesian	
Relation to curriculum	Free elective for telecommunication engineering	
Teaching methods	lectures, small group discussion, Quiz.	
Workload (incl. contact hours, self-study hours)	<p>Contact minutes every week, each week of the 16 weeks/semester:</p> <ul style="list-style-type: none"> • Lectures: 2 x 50 minutes • Exercises and Assignments: 2 x 60 minutes • Private study: 2 x 60 minutes. <p>total study hours = 5 hours 40 minutes/week</p>	
Credit points	2 SKS (~ 3.2 ECTS)	
Required and recommended prerequisites for joining the module	<ul style="list-style-type: none"> - Wave Transmission and Propagation (FBC3206) - Telecommunication Electronics (FBC3208) 	
Module objectives/intended learning outcomes	1. Students are able to explain the concept of radar, knowing the types of radars and understanding their working principles	PLO3
	2. Students are able to design radar system applications	PLO4
	3. Students are able to use knowledge about radar for implementation in everyday life	PLO9
Content	<ol style="list-style-type: none"> 1. The basic working principle of radar and navigation and its application 2. Weather radar system and weather radar mapping and benefits 3. The working principle of each type of radar and navigation and knowing its application 4. Basic concepts of remote sensing 5. Digital principles in remote sensing 6. Image interpretation 	

Examination forms	<ul style="list-style-type: none"> - Essay - Presentation case study - Midterm and final test
Study and examination requirements	<p>The final grade in the module is composed of:</p> <ul style="list-style-type: none"> a. Case I assessment: 15% b. Case II assessment: 15% c. Midterm assessment: 30% d. Final assessment: 40% <p>Students must have a final grade of 65% or higher to pass</p>
Reading list	<ol style="list-style-type: none"> 1. Green E.I., Fisher H.J., Ferguson J.G., 1946, Techniques and Facilities for Microwave Radar, New York: Bell System Technology 2. Ralph D., 1981, Airplane Electronic Equipment, InglewoodCalifornia : Northrop Institute of Technology

