

Module designation	Philosophy of Science and Research Methodology
Module level, if applicable	
Code, if applicable	CIL 23811
Subtitle, if applicable	
Courses, if applicable	
Semester(s) in which the module is taught	1 st Semester
Person responsible for the module	Prof. Sudharto Prawata Hadi, MES, Ph.D.
Lecturer	<ul style="list-style-type: none"> • Prof. Sudharto Prawata Hadi, MES, Ph.D. • Prof. Dr. Ir. Purwanto, DEA • Dr. Dra. Henna Rya Abdurachim, Apt., MES
Language	<i>Indonesian and English</i>
Relation to curriculum	Students are able to understand the position of knowledge, study of knowledge and scientific perspectives and philosophy of science through lectures and discussion activities
Type of teaching, contact hours	<i>Lecture: 60 minutes</i> <i>Q&A: 10 minutes</i> <i>Discussion: 10 minutes</i> <i>Presentation: 10 minutes</i>
Workload	<ul style="list-style-type: none"> • <i>50 minutes of face-to-face lectures in class</i> • <i>1 hour of structured assignments (doing homework or assignments given by lecturers)</i> • <i>1 hour of independent work (reading books, papers, etc.)</i>
Credit points	<i>3 credits</i>
Requirements according to the examination regulations	<i>Minimum attendance of lectures 75%</i>
Recommended prerequisites	
Module objectives/ intended learning outcomes	<ul style="list-style-type: none"> • Have the ability to explore, integrate, and construct various sources of knowledge in the reality of life into the scope of science • Have the ability to select and build linkages between the uniqueness of various local knowledge for scientific development according to the rules of science • Able to describe the relationship between knowledge, philosophy and philosophy of science from sociology, epistemology, and axiology.
Content	The Philosophy of Science course discusses; the position of knowledge, habits, beliefs of a person or group of people in science, knowledge of sources of knowledge, scientific methods, scientific results, scientific attitudes, sources of truth and limitations of science, as well as the role of science and technology in the development of human civilization. This course trains students to think logically, critically, comprehensively, and contemplatively so that they can understand the interrelationships of various sources of knowledge in the past with the present and the future in the development of science and technology which relies on the integration of axiological anatraontology in building artifacts as scientific products.