6. Research 4

Module designation	Research 4
Module level, if applicable	-
Code, if applicable	PCIL 9443
Subtitle, if applicable	-
Courses, if applicable	-
Semester(s) in which the module is taught	4th Semester
Person responsible for the module	Head of Study Program
Lecturer	Principal Supervisor and Co-Supervisor
Language	Indonesian and English
Relation to curriculum	Compulsory
Type of teaching, contact hours	• Discussion with Principal Supervisor (32 hours, 2 hours weekly for 16 weeks) • Discussion with Co-Supervisor (32 hours, 2 weekly for 16 weeks) • Data analysis (128 hours, 8 hours weekly for 16 weeks) • Developing research result discussion (128 hours, 8 hours weekly for 16 weeks) • Preparing progress report (32 hours, 2 hours weekly for 16 weeks) • Preparing presentation materials (40 hours, 2.5 hours weekly for 16 weeks) • Developing dissertation report (75 hours, 4.7 hours weekly for 16 weeks) Total hours in 1 semester = 467 hours

Student Workload for One ECTS	• Face-to-face discussion with Principal Supervisor (1.78 hours) • Face-to-face discussion with Co-Supervisor (1.78 hours) • Validating dan mentoring in major research data analysis (processing, quantify, optimation analysis, etc.: 7.11 hours) • Validating and mentoring in data explanation for result discussion (7.11 hours) • Preparing presentation materials for result and progress presentation (improvements, challenges, constraints, etc.: 1.78 hours) • Preparing presentation materials for discussion with supervisors (2.22 hours) • Developing dissertation report (4.17 hours) Total workload for one ECTS = 25.94 hours
Laboratory Work	Students taking this course have the chance to utilize the laboratory within the Diponegoro University according to each student's research needs
Credit points	4 SKS which equivalent to 18 ECTS
Requirements according to the examination regulations	Participate in monitoring and evaluating progress of the preparation of the dissertation organized by the Study Program; Collecting of portfolio of progress report for dissertation.
Required and recommended prerequisites for joining the module	Existing competencies in data analysis and scientific writing.
Module objectives/intended learning outcomes	• Able to display research results visually and in writing. • Able to perform data analysis of scientific research results. • Able to draw conclusions on research results.
Content	• Introduction to Research Course 4 • Research Data Processing • Discussion of Data Processing Results • Design of Scientific Publications of Data Processing Results • Presentation of the Dissertation Research Progress Report • Students collect portfolios and progress dissertation preparation

Exams and assessment formats	• Mid-semester progress report assessment, final progress report assessment. • The final grade in the module is composed of 80% performance on portfolio of progress reports, 20% participation in monitoring and evaluating. Students must submit a portfolio of progress reports and a draft dissertation according to the targeted stages as a minimum achievement to pass.
Study and examination requirements	Power point
Reading list	Allison, B., & Race, P. (2004). The student's guide to preparing dissertations and theses. Routledge. Arrows, F. (2008). The authentic dissertation. London: Routledge. Joyner, R. L., Rouse, W. A., & Glatthorn, A. A. (2018). Writing the winning thesis or dissertation: A step-by-step guide. Corwin press. Ramlaul, A. (2020). Dissertation Structure and Presentation. In Medical Imaging and Radiotherapy Research: Skills and Strategies (pp. 363-380). Springer, Cham.