Module designation	*Architectural Graphic Design and Computation*
Semester(s) in which the module is taught	*7th*
Person responsible for the module	*Ir. Setyo Widagdo, M.Si*
Language	*Indonesian language*
Relation to curriculum	*elective*
Teaching methods	*Lectures (100 minutes)* *Practicum sessions (170 minutes)*
Workload (incl. contact hours, self-study hours)	*Contact hours : 14 weeks x 100 minutes* *Structured learning: 14 weeks x 120 minutes* *Independent study: 14 weeks x 120 minutes* *Practicum sessions: 14 weeks x 170 minutes*
Credit points	*3 (2-1) CP or 4.76 (ECTS)* *((14 weeks x 100 minutes) + (14 weeks x 120 minutes) +* *(14 weeks x 120 minutes) + (14 weeks x 170 minutes)) :* *60 minutes/hour* *= 119 hours : 25 study hours/ECTS* *= 4.76 (ECTS)*
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	- *Students are able to apply the basic concepts and principles of cultivation technology and the development of sustainable agriculture technology* - *Students are able to identify, formulate, solve problems, and apply plant science, plant protection, soil science, socio-economic agriculture, and plant production engineering principles that are oriented towards good agricultural practices (GAP)* - *Students are able to plan, design, implement and develop plant production with the latest and environmentally friendly technology creatively and innovatively*
Content	*Communication techniques and graphic presentations; basic presentation [lines, letters, colors]; graphs and charts; sketch, perspective and orthogonal; photography. basic digital modeling, both 2D and 3D. Trimble SketchUp and Autodesk CAD software. Making models using computers to understand the mindset used in digital modeling on computers. The output is that students are able to communicate their ideas in digital form*
Examination forms	*oral presentation, essay*

Study and examination requirements	*Participants are evaluated based on their performance in class (lectures) (70%) and lab (practicum) (30%).* *Performance in theory (100%):* *Mid Exam (20%)* *Final Exam (20%)* *Assignments (40%)* *Class participation (10%)* *Individual quiz (10%)* *Performance in practicum (100%):* *Practicum exam (30%)* *Pre-test or post-test (10%)* *Experiment reports (60%)*
Reading list	1. *Anderson, K. 2014. Design Energy Simulation for Architects: Guide to 3D Graphics. 272p.* 2. *Cing, F. 1992. Grafik Arsitektur. Penerbit Erlangga. Jakarta. 182 hal.* 3. *Pressman, A. 2010 Architectural Design Portable Handbook. McGraw-Hill. 400p.* 4. *The American Institute of Architects. 2007. Architectural Graphic Standards, 11th Edition. 1120p.* 5. *Wang, T.C. 1999. Gambar Denah dan Potongan. Penerbit Erlangga. Jakarta. 131 hal.*