

Module designation	<i>Innovation in Agricultural (AGB109)</i>
Semester(s) in which the module is taught	<i>1<sup>st</sup> semester</i>
Person responsible for the module	<i>Dr. Ir. Indra, MP</i>
Language	<i>English</i>
Relation to curriculum	<i>Compulsory module</i>
Teaching methods	<i>lecture, case project</i>
Workload	<ul style="list-style-type: none"> <li>▪ <i>100 minutes of lecture and discussion per week</i></li> <li>▪ <i>120 minutes of structured tasks per week</i></li> <li>▪ <i>190 minutes of independent activity per week</i></li> <li>▪ <i>100 minutes of laboratory work</i></li> </ul>
Credit points	<i>3 (lesson 2 and lab works 1) = 4.8 ECTS</i>
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<ol style="list-style-type: none"> <li>1. Able to understand the concept of Innovation Agriculture, types of Innovation, and upstream to downstream Innovation in the Agricultural sector</li> <li>2. Able to explain future agriculture, challenges and innovative solutions</li> <li>3. Able to explore various smart agriculture technologies, smart agriculture extensions and Agriculture startups</li> </ol>
Content	This course aims to provide a broad view of Agriculture. This course will contain innovations in the field of agriculture and provide the latest agricultural issues at local, regional and global levels.
Exams and assessment formats	<i>Essay, case analysis, oral presentation</i>
Study and examination requirements	<i>50% study cases</i> <i>10 % presentation</i> <i>10% coursework</i> <i>10% lab work</i> <i>20% midterm examination</i> <i>25% final examination</i>
Reading list	<ol style="list-style-type: none"> <li>1. <i>Badan Penelitian dan Pengembangan Pertanian. 2014. Inovasi Teknologi Pertanian RamahLingkungan dan Berdaya Saing. IAARD Press. Jakarta</i></li> <li>2. <i>Inter-American Institute for Cooperation on Agriculture. 2014. Innovation in Agriculture: aKey Process for Sustainable Development. Institutional Position Paper. San Jose</i></li> <li>3. <i>Rajalahti R, Janssen W, Pehu E. 2008. Agricultural Innovation Systems: From Diagnostics toward Operational Practices. Agriculture and Rural Development. Washington DC.</i></li> <li>4. <i>The World Bank. 2012. Agricultural Innovation Systems: an Investment Sourcebook. Washington, D.C.</i></li> <li>5. <i>Tim Direktorat Riset dan Inovasi IPB. 323 Inovasi IPB dalam 828 Inovasi Indonesia. 2017. Institut Pertanian Bogor. Bogor</i></li> <li>6. <i>Viki T, Toma D, Gons E. 2018. The Corporate Startup Formula Sukses Perusahaan Mapan Mengembangkan Ekosistem Inovasi. Elex Media Komputindo. Jakarta</i></li> <li>7. <i>Yudhana, Anton. 2018. Otomasi dan Instrumentasi untuk Proyek Smart Farming dan Smart Glove. Cv. Mine. Yogyakarta</i></li> </ol>