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| Module designation | *Climate Change and Smart Agriculture* |
| Module level, if applicable | *Bachelor* |
| Code, if applicable | *PNT20193121* |
| Subtitle, if applicable |  |
| Courses, if applicable | 1. *Understanding Climate Change and Intelligent Agriculture* 2. *Effects of Climate Change on soil-plant interactions* 3. *Components of Intelligent Agriculture* 4. *Climate Resilience and Smart Agriculture* 5. *Changes in land use to climate change* 6. *Soil Carbon Sequestration and Carbon Fluxs to Mitigate Climate Change* 7. *Dimenasions of Climate-Smart Agriculture* 8. *The Relationship of Intelligent Agriculture to Climate Change* 9. *Greenhouse Gas Mitigation using Smart Agriculture* 10. *Nanotechnology for climate change mitigation* |
| Semester(s) in which the module is taught | *Uneven* |
| Person responsible for the module | *Dr. Ir. Benito Heru Purwanto, M. P., M. Agr. Sc.* |
| Lecturer | *Dr. Ir. Benito Heru Purwanto, M. P., M. Agr. Sc.*  *Dr. Rudi Hari Murti, S. P., M. P.*  *Bayu Dwi Apri Nugroho, S.T.P., M. Agr., Ph. D* |
| Language | *Bahasa/Indonesia Language.* |
| Relation to curriculum | *Compulsory* |
| Type of teaching, contact hours | *Lecture, practical, and presentation.* |
| Workload | *2/0 SKS or 3,02/0 ECTS* |
| Credit points |  |
| Requirements according to the examination regulations | *Presence must be 70% of all meetings.*  *Has to accomplished all the assignments.* |
| Recommended prerequisites | *-* |
| Module objectives/intended learning outcomes | *Students are able to know and understand the definitions, causes, and components of climate change and smart agriculture*  *Students are able to understand and study smart agriculture as a way of mitigating climate change* |
| Content | 1. *Understanding Climate Change and Intelligent Agriculture* 2. *Effects of Climate Change on soil-plant interactions* 3. *Components of Intelligent Agriculture* 4. *Climate Resilience and Smart Agriculture* 5. *Changes in land use to climate change* 6. *Soil Carbon Sequestration and Carbon Fluxs to Mitigate Climate Change* 7. *Dimenasions of Climate-Smart Agriculture* 8. *The Relationship of Intelligent Agriculture to Climate Change* 9. *Greenhouse Gas Mitigation using Smart Agriculture* 10. *Nanotechnology for climate change mitigation* |
| Study and examination requirements and forms of examination | *Assesment Presentasi/UTS/UAS* |
| Media employed | *Text, Presentation, Visual & Audio Web.* |
| Reading list | 1. *Prasad, M. N. V. and Pietrzykowski, M. 2020. Climate Change and Soil Interactions. Elsevier. Amsterdam, Netherlands.* 2. *Venkatramanan, V., S. Shah, and R. Prasad. 2020. Global Change. Resilient and Smart Agriculture. Springer, Singapore* |