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| Module designation | *Technology of Fertilizer Materials and Fertilization* |
| Module level, if applicable |  *Bachelor* |
| Code, if applicable |  *PNT20192041* |
| Subtitle, if applicable |  |
| Courses, if applicable | 1. *Inorganic Fertilizer*
2. *Analysis of Inorganic Fertilizer*
3. *Organic Fertilizer*
4. *Alternative Fertilizer*
5. *Regulation and Standarization*
6. *Fertilization Recommendation*
7. *Fertilization Method*
8. *Fertilization Technology*
9. *Impact of Fertilization*
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| Semester(s) in which the module is taught |  *Uneven* |
| Person responsible for the module | *Dr. Cahyo Wulandari, S.P., M.P.* |
| Lecturer |  *Dr. Cahyo Wulandari, S.P., M.P.* *Nasih Widya Yuwono, S.P., M.P.* |
| Language |  *Bahasa/Indonesian language* |
| Relation to curriculum | *Elective* |
| Type of teaching, contact hours | *Lecture, practical, presentation* |
| Workload | *2/0 SKS or 3,02/0 ECTS* |
| Credit points |  |
| Requirements according to the examination regulations | *Presence must be 70% pf all meetings**Has to accomplished all the assignment* |
| Recommended prerequisites | *-* |
| Module objectives/intended learning outcomes | *Students can explain kinds of fertilizers, make and deliver them in a timely manner, method and dose**Students can explain the classification, materials and manufacturing process, properties, behavior and reactions in the soil, and make fertilization recommendations.**Students can explain the technology currently developing in fertilizer manufacture**Students are able to explain fertilizer standardization and regulations* |
| Content | 1. *Inorganic Fertilizer*
2. *Analysis of Inorganic Fertilizer*
3. *Organic Fertilizer*
4. *Alternative Fertilizer*
5. *Regulation and Standarization*
6. *Fertilization Recommendation*
7. *Fertilization Method*
8. *Fertilization Technology*
9. *Impact of Fertilization*
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| Study and examinationrequirements and forms of examination | *Assesment Presentasi/UTS/UAS*  |
| Media employed |  *Text, Presentation, Visual & Audio Web.* |
| Reading list | 1. *Fowler, C. W. 1975. Urea and Urea Phosphate Fertilizers. Noyes Data Corporation. London*
2. *Hendrie, R.A. 1976. Granulated Fertilizers. Noyes Data Corporation. London*
3. *Highnett, T. P. 1985. Fertilizer Manual. The International Fertilizer Development Center.*
4. *Ignatieff, V. and HJ Page. 1985. Efficient Use of Fertilizers. Food and Agriculture Organization of the United Nation.*
5. *Roy, R.N., S. Soetharman and B.C. Biswas. 1979. Handbook of Fertilizer Usage. The Fertilizer Association of India. New Delhi.*
6. *Sanchez, P.A. 1976. Properties and Management of Soils in Tropics. John Wiley & Sobs.*
7. *Sittig, M. 1979. Fertilizer Industry, Process, Polition Control and Energy Conservation. Noyes Data Corporation.*
8. *Subba Rao, N.S. 1982. Biofertilization in Agriculture. Oxford & IBH Publishing Co. New Delhi.*
9. *Subba Rao, N.S. 1982. Advancer in Agricultural Microbiology. Oxford & IBH Publishing Co. New Delhi.*
10. *Tisdale, S.L., W.L., Nielsen & J.D. Beaton. 1986. Soil Fertility and Subba Rao, N.S. 1982. Biofertilization in Agriculture. Oxford & IBH Publishing Co. New Delhi.*
11. *Tisdale, S.L., W.L., Nelson J.D. Beaton. 1986. Soil Fertiliy and Fertilizers. Macmillan Pub. New York. Xiv + 754 h.*
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