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| Module designation | *Analytical Chemistry* |
| Module level, if applicable | *Bachelor* |
| Code, if applicable | *PNT20191203* |
| Subtitle, if applicable |  |
| Courses, if applicable | 1. *Introduction* 2. *Terminology in analytical chemistry* 3. *Evaluation of analytic data* 4. *Cation analysis* 5. *Anion analysis* 6. *Gravimetric analysis* 7. *Volumetric analysis* 8. *Acid-base titration* 9. *Oxidation-reduction titration* 10. *Precipitation titration* 11. *Complexometric titration* |
| Semester(s) in which the module is taught | *Even* |
| Person responsible for the module | *Dr. Ir. Eko Hanudin, M.S.* |
| Lecturer | *Dr. Ir. Eko Hanudin, M.S.*  *Prof. Dr. Tri Wahyuni*  *Dr. Iqmal Tahir* |
| Language | *Bahasa/Indonesian language* |
| Relation to curriculum | *Compulsory* |
| 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% of all meetings*  *Has to accomplished all the assignments* |
| Recommended prerequisites | *-* |
| Module objectives/intended learning outcomes | *Students can know and understand the basic principles and calculations in analytical chemistry*  *Students understand and are able to perform analysis using titration, gravimetric, electrochemical methods*  *Students understand the role and application of analytical chemistry in soil science* |
| Content | 1. *Introduction* 2. *The role of analytical chemistry for agriculture and the environment* 3. *Titration in analytical chemistry and the principle of its calculation* 4. *Organic compounding agents* 5. *Gravimetric analysis* 6. *Electrochemical method* 7. *Separation technique* |
| Study and examination  requirements and forms of examination | *Assesment Presentasi/UTS/UAS* |
| Media employed | *Text, Presentation, Visual & Audio Web.* |
| Reading list | 1. *Harvey, D. 2000. Modern Analytical Chemisry. McGraw-Hill. New York Skoog, West and Holler. 1996. Fundamentals of Analytical Chemistry. 7th ed. Saunders College Publishing Forth Worth* 2. *Lagowski, J.J and Sorum, C.H. 1991. Introduction to Semimicro Qualitative Analysis. 7 th ed. Prentice Hall. New Jersey* |