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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*
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| 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*
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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. *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*
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