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| N° ECUE | XA4S502 |
| Title | Mathematical method for engineers |
| ECTS |  | Lecture(h)CM 10,5h |  | Tutorials (h)TD 22h |  | Pratical works (h) TP |  | Project (h) |  |
| DescriptionThis teaching lays the foundations in mathematics necessary for the other subjects of the yearThe content is the following:1/ differentiation of functions with one variable, limited developments2/ root finding numerical methods3/ vectors differentiation4/ partial and total derivatives5/ differential operators6/ optimum finding, mean square regression7/ integration, ordinary differential equations8/ numerical integration methods9/ basic matrix calculation – linear system solution 10/ interpolation11/ application of linear algebra to geometry12/ jacobian matrix and non-linear system solution |
| Key Words | Linear algebra, analysis, derivation, integration, interpolation, optimisation, numerical methods |
| Type of Evaluation | Continuous assessment (several small assessments and 2 of 1hour each) |