## Content

| Course Code | Course Name     | Semester | Theory | Practice | Lab | Credit | ECTS |
|-------------|-----------------|----------|--------|----------|-----|--------|------|
| CNT474      | Risk Management | 8        | 2      | 0        | 0   | 2      | 2    |

| Prerequisites          |  |
|------------------------|--|
| Admission Requirements |  |

| Language of Instruction | French  |  |  |
|-------------------------|---|--|--|
| Course Type             | Elective  |  |  |
| Course Level            | Bachelor Degree   |  |  |
| Objective               | The aim of this course is to introduce the concepts of risk and uncertainty to the students by giving information on the risk management process and to show various application areas by introducing the theoretical and practical information about risk measurement, management and control. |  |  |
| Content                 | 1. Semaine : Probabilities - Decision Theory - Utility Theory   |  |  |
|                         | 2. Semaine : Basic Concepts Risk - Risk Analysis - Risk Management Limitations of Risk Analysis   |  |  |
|                         | 3. Semaine : Types of Uncertainty Effects of Uncertainty on Risk Management Decision Making Under Risk  |  |  |
|                         | 4. Semaine : Quantifying Risk Risk Management Options Risk Management Principles  |  |  |
|                         | 5. Semaine : Risk Management Process  |  |  |
|                         | 6. Semaine : QUIZ   |  |  |
|                         | 7. Semaine : Methods of Risk Analysis I   |  |  |
|                         | 8. Semaine : MIDTERM  |  |  |
|                         | 9. Semaine : Methods of Risk Analysis II  |  |  |
|                         | 10. Semaine : Methods of Risk Analysis III  |  |  |
|                         | 11. Semaine : Risk Assessment in Engineering Economy I  |  |  |
|                         | 12. Semaine : Risk Assessment in Engineering Economy II   |  |  |
|                         | 13. Semaine : Risk Intelligence   |  |  |
|                         | 14. Semaine : Projects Presentations  |  |  |
| References              | Molak, V., Fundamentals of Risk Analysis and Risk Management, Lewis Publishers, 1997.   |  |  |
|                         | Aven, T., Risk Analysis: Assessing Uncertainties Beyond Expected Values and Probabilities, John Wiley & Sons, Ltd., West Sussex, England, 2008.   |  |  |

## **Theory Topics**

|      | 11              |  |
|------|-----------------|--|
| Week | Weekly Contents |  |
|      |                 |  |