

| Module | Contents  | Learning Objectives  | Extent | ECTS Points |
|--------|---|--|--------|-------------|
| DAY 1  | Introduction to UAS operation                   | Familiarization with UAS operation and related issues.   | 2 h    | N/A         |
|        | Safety in Aviation (Manned vs. Unmanned)        | Scope of this block is highlight the differences that exist between the approaches towards safety applied to the manned and to the unmanned aviation.  | 2 h    | N/A         |
|        | Qualitative and quantitative approach to safety | Compliance with safety regulation can be obtained by performing qualitative and quantitative analyses. The main differences as well benefit and drawbacks of the two approaches are highlighted. | 2 h    | N/A         |
|        | Bow-tie models                                  | Comprehension of the Bow Tie method since this is at the basis of the SORA method.   | 2 h    | N/A         |
| DAY 2  | Introduction to SORA                            | Understanding of the SORA assessment. Holistic approach. Various part of the SORA process.   | 2 h    | N/A         |
|        | ConOps and Robustness                           | Concept of operation and related robustness will be discussed in principle and via practical examples. The objective is to make the participants familiar with these concepts.                   | 2 h    | N/A         |
|        | Ground Risk Class and Mitigations               | Familiarization with the methodology required to assess the Ground Risk Class and which should be the appropriate Mitigations.   | 2 h    | N/A         |
|        | DAL and SAIL                                    | The concept of Development Assurance Level (DAL) is introduced and the link with the Specific Assurance and Integrity Level (SAIL) in discussed.   | 2 h    | N/A         |
| DAY 3  | OSO vs. SAIL                                    | Understanding of the relationship between the Operational Safety Objectives (OSO) and the SAIL levels.   | 2 h    | N/A         |
|        | Introduction to the Air Risk model              | Familiarize with the model of air risk adopted in the SORA.  | 2 h    | N/A         |
|        | Nominal Collision Risk and DAA                  | Familiarize with the concepts of nominal collision risk and DAA.   | 2 h    | N/A         |
|        | Off-Nominal Risk, failures and Air SAIL         | Familiarize with the concepts of off-nominal risk, failures and Air SAIL.  | 2 h    | N/A         |
| DAY 4  | CASE STUDY 1 & 2                                | The concepts explained in the previous days will be applied to a practical example that will be directly derived from a real case.   | 8 h    | N/A         |