Annex 6

Confirmed by directive No 6.1-6/40 of 17.03.17 of the Vice Rector of Academic Affairs

**SYLLABUS**

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| **SUBJECT CODE** | RKRC5214 | | | |
| **NAME OF THE SUBJECT (in Estonian)** | Drooniga info kogumine ja selle analüüs | | | |
| **NAME OF THE SUBJECT (in English)** | Drone operations, information gathering and analysis on incident site | | | |
| **VOLUME (ECTS)** | 3 ECTS | | | |
| **CURRICULUM** | Rescue | | | |
| **RESPONSIBLE LECTURER** | Andres Mumma | | | |
| **PREREQUISITE MODULES AND SUBJECTS:** | | - | | |
| **OBJECTIVE OF THE SUBJECT:** Provide an overview and basic means of implementation of operating drone and gathering and analyzing drone data | | | | |
| **LEARNING OUTCOMES** | | | **ASSESSMENT METHODS** | **ASSESSMENT CRITERIA** |
| **After completing the subject the student:** | | |  |  |
| The student has an overview of flight safety | | | Written test | Threshold: 80% of the answers should be correct |
| The student can operate drone and gather information using it on incident sites | | | Practical test | All the operations should be conducted according to safety rules. All the needed data should be gathered |
| The student can prepare 2D and 3D incident site datasets and implement the means of basic incident site analysis | | | Groupwork: preparation of 2D/3D incident site map/model and written analysis of it. The results should be presented using slides to the classroom | Incident site map/model should have accuracy error less than 10cm. Analysis results shold base on common sense and the presentation should cover all the needed topics |
| **Requirements for and the composition of the final grade / credit test**  The student passes the whole subject successfully if all the learning outcomes are achieved according to assessment criteria | | | | |

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| **VOLUME OF STUDIES (study group/form of study)** | | | | | |
| **LECTURE (number of hours)** | **SEMINAR (number of hours)** | **PRACTICAL WORK (number of hours)** | **INDIVIDUAL WORK (number of hours)** | **E-LEARNING (number of hours)** | **TOTAL (number of hours)** |
| 6 | 2 | 28 | 40 | 2 | 78 |

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| **CONTENT OF STUDIES (study group/form of study)** | | | |
| **TOPIC** | **LECTURER** | **NO OF LESSONS** | **INDIVIDUAL WORK AND LITERATURE** |
| Airspace management, flight safety and theoretical basics flying the drone | Andres Mumma | 4 | Acquisition of lecture notes and other learning material |
| Theoretical flight planning and data gathering | Andres Mumma | 2 | Acquisition of lecture notes and other learning material, training with flight planning applications |
| Practical flying and data gathering | Andres Mumma | 8 | - |
| Data processing and preparation of 2D/3D incident site maps/models | Andres Mumma | 16 | Acquisition of lecture notes, other learning material and E-learning videos, training with data processing applications |
| Analysis of 2D/3D datasets | Andres Mumma | 6 | Acquisition of lecture notes, other learning material and E-learning videos, training with data processing applications |
| **COMPULSORY RESOURCES:**   1. Lecture notes and other learning material given by the lecturer 2. E-learning videos given by the lecteurer | | | |

Compiled by: Andres Mumma

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