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

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Compiled by: Andres Mumma

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