

Przeznaczenie przedmiotu Purpose of course	To familiarize the students with applications, possibilities, technologies and latest trends in progress of unmanned aerial systems
Prowadzenie zajęć Conducting classes	Lecture: 2h/week, Project: 1h/week, 15 weeks in summer semester
Materiały do przedmiotu Course materials	<ul style="list-style-type: none"> • Project of an UAS – a manual (description) for preparation of the projects – prepared by Z.Goraj (February 2023), pdf document written on 17 A4 pages • Codes for access for Aircraft and Helicopters Department with many data bases useful for UAS design activity • open access literature, available in the Faculty Library located in Heat Transfer Institute. Selected examples are given bellow: (1) Jane's (2011), Jane's Unmanned Aerial Vehicles and Targets, Issue Thirty-six, Editor: Mark Daly. (2) Gundlach Jay, Designing Unmanned Aircraft Systems – A comprehensive Approach, AIAA Education Series, Reston, Virginia 2012
Obecność na zajęciach Class attendance	<ul style="list-style-type: none"> • Presence at any lecture is confirmed by student's signature on the list of presence prepared by lecturer for all 15 lectures. These all 15 lists are checked when final grade for the module is given for the student. The necessary (but not sufficient) condition for positive grade means that student must be present at least 3 times per whole semester • Presence during project meetings is absolutely necessary when any of 6 projects is assessed. Delay in project delivery on 1 week may results in decreasing the grade on 1 point (in the traditional scale of grades between 0 and 5). Postponing on 3 weeks will result in striking all students of the project group from the list of UAS module.
Weryfikacja osiągnięcia efektów uczenia się Verification of achievement of learning outcomes	<ul style="list-style-type: none"> • Grades of all 6 projects must be positive • All 15 lists signed by students at lectures are checked when final grade for the module is given for the student. The necessary (but not sufficient) condition for positive grade means that student must be present at least 3 times per whole semester • Any student must present a review of a selected scientific paper devoted to various aspects of UAS technology which is delivered to student by lecturer. If the review is not delivered the final student grade cannot be positive • All these formal requirements must be fulfilled before the end of summer semester and cannot be postponed to summer time or September. The next chance to fulfil the requirements will be in the next academic year in summer semester. If some requirements are obtained in given academic year they cannot be recognized in the next academic year and therefore all requirements must be fulfilled from scratch.

Pomoce dopuszczone do użycia podczas weryfikacji osiągnięcia efektów uczenia się	No restrictions, all aids are acceptable
Aids acceptable for use in verifying achievement of learning outcomes	
Zasady zaliczenia przedmiotu i wystawiania oceny końcowej	All necessary conditions are given the part entitled "Verification of achievement of learning outcomes". Final score depends on scores of all 6 successive stages of the project and with extra necessary conditions that student regularly attend lectures and will deliver the presentation mentioned before.
The rules for passing the course and for calculating the final grade	
Termin i tryb ogłaszania ocen	Final grade is offered by lecturer after the carton folder with all 6 projects is given to lecturer. This final grade is put at the student lists prepared by Dean Office. This must be done at the final project meeting at the latest and cannot be continued in summer time or during the September exam session. The next chance for any student will be in the next academic year in summer semester and in the such case all requirements must be repeated from scratch
Deadline and procedure for announcing grades	
Zasady powtarzania zajęć z powodu niezaliczenia przedmiotu	The next chance for any student will be in the next academic year in summer semester and in the such case all requirements must be repeated from scratch
Rules of repetition of classes due to failure of a subject	
Inne	
Others	No other comments