Aircraft Design

Cezary Galiński
cezary.galinski@pw.edu.pl
SL 300 B

Agnieszka Kwiek
agnieszka.kwiek@pw.edu.pl
SL305

Jacek Mieloszyk
Jacek.Mieloszyk@pw.edu.pl
SL200C

Aircraft Design

Learning outcomes:

- Student knows components of the aircraft design process.
- Student is capable to design simple airplane.
- Student knows functions, characteristics and loads of an airplane components.
- Student is capable to analyze flight characteristics and loads of an airplane, select and evaluate the propulsion system and equipment.

Aircraft Design

Learning outcomes:

- Student knows how to conduct trends analysis in aeronautics.
- Student is capable to analyze costs.
- Student knows selected rules of current airworthiness regulations.
- Student is capable to prepare the documentation of his/her engineering work.
- Student is aware of deadlines importance.

Rules of crediting

Colloquium 1	Colloquium 2	5 projects
max. 25 pt.	max. 25 pt.	max. 50 pt. (5 x 10)

Maximum amount of points for each project decreases by 2 every week after it's deadline.

0 pt. from any project is equivalent to the overall course failure.

Possible exceptions:

- important and documented accident or sickness

- active and documented work in students' scientific clubs or students union.

Project deadlines

Project 1	**18.10.2022**
Project 2	**08.11.2022**
Project 3	**13.12.2022**
Project 4	**03.01.2023**
Project 5	**17.01.2023**

Rules of positive crediting

1. More than 51 pt. altogether
and
2. more than 13 pt. from colloquium 1
and
3. more than 13 pt. from colloquium 2
and
4. all 5 projects accepted (together, no less than 25 pt.)

Marks

No. of points	mark
N<51	2,0
51≤N<68	3,0
68≤N<79	3,5
79≤N<88	4,0
88≤N<95	4,5
95≤N	5,0

References:

T. C. Corke „Design of Aircraft”
http://wps.prenhall.com/esm_corke_aircraft_1

D.P. Raymer „Aircraft Design, a Conceptual Approach”

J. Roskam „Airplane Design”

D. Stinton „The Design of the Aeroplane”

E.Torenbeek „Synthesis of Subsonic Airplane Design”

J.D. Anderson „Aircraft Performance & Design”

J.P. Fielding „Introduction to Aircraft Design”

L.R. Jenkinson, J.F.Marchman III „Aircraft Design Projects”