



# Study Plan

## B.Sc. Power Engineering

**Faculty of Power and Aeronautical Engineering**

*Study plan for reference only; may be subject to change.*

Lc – Lecture    T – Tutorial    Lb – Laboratory    P – Project    S – Seminar

### Semester 1

List of common courses:

No.	Course number	Course name	Lc	T	Lb	P	S	ECTS points
1.	<a href="#">ANW101</a>	Algebra and geometry	0	3	0	0	0	4
2.	<a href="#">ANW102</a>	Calculus 1	2	3	0	0	0	7
3.	<a href="#">ANW106</a>	Computer science 1	2	0	2	0	0	5
4.	<a href="#">ANW105</a>	Engineering graphics	1	0	1	0	0	2
5.	<a href="#">ANW104</a>	Engineering physics	1	2	0	0	0	3
6.	<a href="#">ANW109</a>	Environment protection	2	0	0	0	0	2
7.	<a href="#">ANW71</a>	Health and Safety Training	0	1	0	0	0	0
8.	<a href="#">ANW72</a>	Library Training	0	1	0	0	0	0
9.	<a href="#">ANW107</a>	Materials 1	2	0	0	0	0	2
10.	<a href="#">ANW108</a>	Mechanics 1	1	1	0	0	0	3
11.	<a href="#">ANWF1</a>	Physical Education and Sports 1	0	2	0	0	0	0
12.	<a href="#">ANPL1</a>	Polish Language 1	0	2	0	0	0	0
13.	<a href="#">ANW103</a>	The Wittgenstein's Philosophy - Ethics	2	0	0	0	0	2

## Semester 2

List of common courses:

No.	Course number	Course name	Lc	T	Lb	P	S	ECTS points
1.	<a href="#">ANW90</a>	Calculus 2	2	2	0	0	0	5
2.	<a href="#">ANW114</a>	Computer science 2	1	0	1	0	0	2
3.	<a href="#">ANW112</a>	Economics	2	0	0	0	0	2
4.	<a href="#">ANW113</a>	Electric Circuits 1	2	1	0	0	0	3
5.	<a href="#">ANW118</a>	Engineering graphics - CAD 1	0	0	2	0	0	2
6.	<a href="#">ANJ1</a>	English Language 1	0	2	0	0	0	2
7.	<a href="#">ANW115</a>	Mechanics 2	2	2	0	0	0	5
8.	<a href="#">ANW117</a>	Mechanics of structures 1	2	1	0	0	0	4
9.	<a href="#">ANWF2</a>	Physical Education and Sports 2	0	2	0	0	0	0
10.	<a href="#">ANPL2</a>	Polish Language 2	0	2	0	0	0	0
11.	<a href="#">ANW116</a>	Thermodynamics 1	2	2	0	0	0	5

## Semester 3

List of common courses:

No.	Course number	Course name	Lc	T	Lb	P	S	ECTS points
1.	<a href="#">ANW123</a>	Basics of automation and control 1	2	1	0	0	0	4
2.	<a href="#">ANW91</a>	Calculus 3	1	2	0	0	0	3
3.	<a href="#">ANJ2</a>	English Language 2	0	2	0	0	0	2
4.	<a href="#">ANW122</a>	Fluid mechanics 1	2	1	0	0	0	4
5.	<a href="#">ANW124</a>	Machine design 1	1	1	0	0	0	3
6.	<a href="#">ANWF3</a>	Physical Education and Sports 3	0	2	0	0	0	0

List of field of study courses:

No.	Course number	Course name	Lc	T	Lb	P	S	ECTS points
1.	<a href="#">ANK317</a>	Electric circuits 2	0	0	2	0	0	3
2.	<a href="#">ANK423</a>	Heat transfer 1	1	1	0	0	0	3
3.	<a href="#">ANK405</a>	Theory of heat machines	2	1	0	0	0	3
4.	<a href="#">ANK411</a>	Thermodynamics 2 (lab)	0	0	2	0	0	3
5.	<a href="#">ANK413</a>	Thermodynamics 3	1	1	0	0	0	3

### Semester 4

**List of common courses:**

No.	Course number	Course name	Lc	T	Lb	P	S	ECTS points
1.	<a href="#">ANW135</a>	Electronics 1	1	1	0	0	0	2
2.	<a href="#">ANJ3</a>	Foreign Language 3	0	2	0	0	0	2
3.	<a href="#">NJAC1</a>	Languages - C1_Egzam (English)	0	0	0	0	0	0
4.	<a href="#">ANW125</a>	Machine design 2	1	1	0	0	0	3
5.	<a href="#">ANWF4</a>	Physical Education and Sports 4	0	2	0	0	0	0

**List of field of study courses:**

No.	Course number	Course name	Lc	T	Lb	P	S	ECTS points
1.	<a href="#">ANK380</a>	Combustion and Fuels	1	1	0	0	0	3
2.	<a href="#">ANK333</a>	Electric Machines 1	1	1	0	0	0	3
3.	<a href="#">ANK381</a>	Electric Power Systems	2	1	0	0	0	5
4.	<a href="#">ANK316</a>	Electronics 2 (lab)	0	0	1	0	0	1
5.	<a href="#">ANK340</a>	Fluid mechanics 2	0	0	1	0	0	1
6.	<a href="#">ANK341</a>	Fluid mechanics 3	1	1	0	0	0	2
7.	<a href="#">ANK376</a>	Fundamentals of Management	2	0	0	0	0	2
8.	<a href="#">ANK424</a>	Heat transfer 2	0	0	1	0	0	1
9.	<a href="#">ANK351</a>	Measurements and technique of experiment	1	1	0	0	0	2
10.	<a href="#">ANK406</a>	Theory of flow machines	2	1	0	0	0	3

## Semester 5

**List of common courses:**

No.	Course number	Course name	Lc	T	Lb	P	S	ECTS points
1.	<a href="#">ANJ4</a>	Foreign Language 4	0	4	0	0	0	2
2.	<a href="#">ANWF5</a>	Physical Education and Sports 5	0	2	0	0	0	0

**List of field of study courses:**

No.	Course number	Course name	Lc	T	Lb	P	S	ECTS points
1.	<a href="#">ANK442</a>	Electric Machines II (lab)	0	0	1	0	0	1
2.	<a href="#">ANK329</a>	Electric Power Systems 2 (lab)	0	0	2	0	0	3
3.	<a href="#">ANK390</a>	Energy systems	1	1	0	0	0	3
4.	<a href="#">ANK364</a>	Fundamentals of Operation and Maintenance	2	1	0	0	0	5
5.	<a href="#">ANK332</a>	Marketing (ang)	2	0	0	0	0	2

**List of specialization courses:**

No.	Course number	Course name	Lc	T	Lb	P	S	ECTS points
1.	<a href="#">ANS510</a>	Chemistry of Water	2	0	0	0	0	2
2.	<a href="#">ANS603</a>	Energy sources and conversion	1	1	0	0	0	2
3.	<a href="#">ANS549</a>	Internal Combustion Engines	2	0	0	0	0	2
4.	<a href="#">ANS539</a>	Rotodynamic Pumps and Pumping Systems	0	2	0	0	0	2
5.	<a href="#">ANS521</a>	Steam Boilers	1	1	0	0	0	2
6.	<a href="#">ANS577</a>	Turbines	2	0	0	0	0	2

## Semester 6

### List of common courses:

No.	Course number	Course name	Lc	T	Lb	P	S	ECTS points
1.	<a href="#">ANJ5</a>	Foreign Language 5	0	4	0	0	0	2
2.	<a href="#">ANW127</a>	Intermediate Engineering Project	0	0	0	4	0	6
3.	<a href="#">ANWF6</a>	Physical Education and Sports 6	0	2	0	0	0	0
4.	<a href="#">ANW126</a>	Physics 1	2	0	0	0	0	3

### List of field of study courses:

No.	Course number	Course name	Lc	T	Lb	P	S	ECTS points
1.	<a href="#">ANK443</a>	Energy Management	1	1	0	0	0	2

### List of specialization courses:

No.	Course number	Course name	Lc	T	Lb	P	S	ECTS points
1.	<a href="#">ANS534</a>	Advanced Renewable Energy Sources	2	1	0	0	0	3
2.	<a href="#">ANS555</a>	Control of Heat Processes	2	0	0	0	0	2
3.	<a href="#">ANS540</a>	Heat Pumps	1	1	0	0	0	2
4.	<a href="#">ANS524</a>	Power Engineering Machines and Systems 1 (lab)	0	2	0	0	0	2
5.	<a href="#">ANS516</a>	RES - Solar Engineering 1	2	0	0	0	0	2
6.	<a href="#">ANS566</a>	Technologies of Environmental Protection	2	0	0	0	0	2
7.	<a href="#">ANS550</a>	Thermal Power Stations	2	0	0	0	0	2

### Semester 7

List of common courses:

No.	Course number	Course name	Lc	T	Lb	P	S	ECTS points
1.	<a href="#">ANW128</a>	Engineering Diploma Seminar	0	0	0	2	0	2
2.	<a href="#">ANW136</a>	Engineering Diploma Thesis	0	0	0	12	0	15

List of specialization courses:

No.	Course number	Course name	Lc	T	Lb	P	S	ECTS points
1.	<a href="#">ANS625</a>	Energy Market	2	0	0	0	0	3
2.	<a href="#">ANS527</a>	Energy storage	2	0	0	0	0	2
3.	<a href="#">ANS576</a>	Gas turbines and gas-steam systems	2	0	0	0	0	3
4.	<a href="#">ANS525</a>	Power Engineering Machines and systems II (lab)	0	0	2	0	0	2
5.	<a href="#">ANS517</a>	RES - Solar Engineering 2 (Lab)	0	0	1	0	0	1