## Study plan

# Name of study plan: PP bakal.prez.09/10za átek

Faculty/Institute/Others:

Department:

Branch of study guaranteed by the department: Welcome page

Garantor of the study branch: Program of study: Welcome page Type of study: unknown full-time

Required credits: 210 Elective courses credits: 0 Sum of credits in the plan: 210

Note on the plan:

Name of the block: Compulsory courses Minimal number of credits of the block: 210

The role of the block: Z

Code of the group: 1.S-PP08/09

Name of the group: 1.s.PP prez.bak.od08/09

tennis, squash, floorball, bodybuilding, swimming, canoeing, aerobic.

Requirement credits in the group: In this group you have to gain 30 credits

Requirement courses in the group: In this group you have to complete at least 8 courses

Credits in the group: 30 Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
11ATGR	Algebra and Graph Theory	Z,ZK	5	2+2	Z	Z
11GMR	Geometry	Z,ZK	5	2+2		Z
15J1A1	Foreign Language - English 1	Z	2	0+2		Z
11ML1	Mathematics for Aviation 1	Z,ZK	6	2+3		Z
18TDKL	Technical Documentation in Aeroplane Design	KZ	3	2+1		Z
00TVC1	Physical Education 1	Z	1	0+2	Z	Z
21TPV	Essential Theory for Starting Pilot Training	Z,ZK	5	3+1		Z
14ZI	Basic of Informatics	KZ	3	0+2	Z	Z

11ATGR	Algebra and Graph Theory	Z,ZK	5			
Vector spaces, vecto	rs, linear independence, bases. Matrices, rank, trace, linear mapping, special matrices. System of linear equation. Eigenvectors	and eigenvalues	of matrices,			
similar matrices, the	characteristic matrix and characteristic polynomial of a matrix. Quadratic forms - diagonal form, associated symmetric matrix, si	gnature, Sylveste	r's Inertia Law.			
Basic definitions of 0	Graph Theory (oriented graphs, walk, trail, path, cycle, trees).					
11GMR	Geometry	Z,ZK	5			
Topographic surface	s, Orthogonal projection, axonometric projection (orthogonal axonometry, skew projection), perspective projection, curves - con	c sections, examp	oles of plane			
curves, basics of diff	erential geometry of curves: parameterization, arc of the the curve, torsion and curvature, Frenet's trihedron, surfaces of revolutions	ion, quadrics, rule	d quadrics, etc.			
15J1A1	Foreign Language - English 1	Z	2			
The students of the	aculty of Transportation Sciences study two foreign languages one after another at the Department of Humanities. These cours	es aim at providir	ıg sufficient			
knowledge to comm	ınicate about every-day matters but also to read and write and discuss professional and specialised issues. Both gra	adually chosen lar	nguage courses			
are ended with an ex	am (at the end of 4th and 8th semester; the TL (Air Traffic Control) specialisation students take an English exam only - at the er	id of 4th semester	r; the PP			
(Professional Pilot) s	pecialisation students take two exams in English - at the end of 4th and 6th semester). Those students who want to apply for the	a Air Traffic specia	lizations are			
recommended to en	ol "English language" as their first choice. This is, however, not a guarantee for being excepted in the project study. 	Our department p	rovides courses			
in English, German,	French and Russian at different levels. The courses are also taught in our multimedia laboratory.					
11ML1	Mathematics for Aviation 1	Z,ZK	6			
Real and complex n	imbers. Sequences, real function of real variable, composite and inverse functions, limits, continuity, derivatives, differentials, in	estigation of func	tions for their			
properties. Integral o	alculus of functions of one variable with applications. Solution of ordinary differential equations, separation of variables.					
18TDKL	Technical Documentation in Aeroplane Design	KZ	3			
General principles, parts lists, handling of modification of Technical Documents, data exchange.						
00TVC1	Physical Education 1	' _	1			

21TPV Essential Theory for Starting Pilot Training

z,zk

5

The lectures will be based on experiences from FTO and will be approved by CAA. The lectures are recommended for beginners and content necessary basis for beginning of practical pilot's training. The areas of lectures are air traffic and requirements, aircraft, flight planning, human endurance and limitations, meteorology, navigation, procedures, aerodynamics and radio communication.<br&gt;\lambda[t];br\lambda[t];b

14ZI Basic of Informatics

ΚZ

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Introduce to the faculty network and faculty information systems. Theory of information - basic terms. Number systems, conversions, analog / digital representation of the information. Architecture and activity of the numerical computing systems. Algorithms and their graphical flowchart representation. Algorithm development and solution finding by simple program languages. Engineer computation by specialized software - practical tasks. Classified credit examination.

Code of the group: 2.S.-PP08/09

Name of the group: 2.sem.PP prez.bak.od 08/09

Requirement credits in the group: In this group you have to gain 30 credits

Requirement courses in the group: In this group you have to complete at least 10 courses

Credits in the group: 30 Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
11FZL1	Physics for Aviation 1	Z,ZK	5	2+2		Z
15J1A2	Foreign Language - English 2	Z	2	0+2		Z
14KPP1	Computer Aided Design 1 (AutoCAD Basic Steps)	KZ	3	0+2		Z
11ML2	Mathematics for Air Branches 2	Z,ZK	4	2+2		Z
21OPC	Air Transport Business	KZ	3	1+1		Z
18TM	Technical Mechanics	Z,ZK	4	2+1		Z
00TVC2	Physical Education 2	Z	1	0+2	L	Z
21ZENP	Basics of Aircraft Electronics	ZK	3	2+0		Z
21ZETP	Basics of Aircraft Electronics	Z,ZK	3	2+1		Z
17ZKP	Introduction to Law	KZ	2	2+0		Z

Characteristics of the courses of this group of Study Plan: Code=2.S.-PP08/09 Name=2.sem.PP prez.bak.od 08/09

11FZL1	Physics for Aviation 1	Z,ZK	5
Kinematics. Dynai	amics.Thermodynamics. Electric field.	' '	
15J1A2	Foreign Language - English 2	Z	2
The students of th	he Faculty of Transportation Sciences study two foreign languages one after another at the Department of Humanities. The	se courses aim at providing	g sufficient
knowledge to com	mmunicate about every-day matters but also to read and write and discuss professional and specialised issues. 	Both gradually chosen lan	guage course
are ended with an	n exam (at the end of 4th and 8th semester; the TL (Air Traffic Control) specialisation students take an English exam only -	at the end of 4th semester;	the PP
Professional Pilo	ot) specialisation students take two exams in English - at the end of 4th and 6th semester). Those students who want to app	oly for the Air Traffic special	izations are
	enrol "English language" as their first choice. This is, however, not a guarantee for being excepted in the project study. <b an, French and Russian at different levels. The courses are also taught in our multimedia laboratory.</b 	or> Our department pr	ovides course
14KPP1	Computer Aided Design 1 (AutoCAD Basic Steps)	KZ	3
Determination of "	"CAD Systems" term. CAD task in system projecting model. Concurrent CAD system in Czech market. Basic AutoCAD cours	se in 2D environment, user	settings, outp
ptions, designs v	with grid background.		
11ML2	Mathematics for Air Branches 2	Z,ZK	4
	Mathematics for Air Branches 2 equences in metric space. Differential calculus of functions of several variables, differenti	Z,ZK   ial of function, partial derivation	-
•		ial of function, partial deriva	ations, implicit
Metric spaces, sed defined functions,	equences in metric spaces, limit of sequence in metric space. Differential calculus of functions of several variables, different s, extremes of functions of several variables. Integral calculus of function of several variables, Riemann integral in Rn, integral	ial of function, partial deriva	ations, implicit
Metric spaces, sed defined functions, of integral calculus	equences in metric spaces, limit of sequence in metric space. Differential calculus of functions of several variables, different s, extremes of functions of several variables. Integral calculus of function of several variables, Riemann integral in Rn, integral	ial of function, partial deriva	ations, implicit
Metric spaces, set lefined functions, if integral calculus 210PC	equences in metric spaces, limit of sequence in metric space. Differential calculus of functions of several variables, different s, extremes of functions of several variables. Integral calculus of function of several variables, Riemann integral in Rn, integral ous in physics.	ial of function, partial derivious over curves and surfaces in	ations, implici R3, applicati
Metric spaces, sed defined functions, of integral calculus 210PC Czech aviation lav	equences in metric spaces, limit of sequence in metric space. Differential calculus of functions of several variables, differential calculus of functions of several variables, lintegral calculus of function of several variables, Riemann integral in Rn, integral out in physics.  Air Transport Business	ial of function, partial derivitory over curves and surfaces in KZ chedules, tickets booking a	ations, implici R3, applications 3 nd selling,
Metric spaces, sed defined functions, of integral calculus 210PC Czech aviation law eservation syster	equences in metric spaces, limit of sequence in metric space. Differential calculus of functions of several variables, differential, extremes of functions of several variables. Integral calculus of function of several variables, Riemann integral in Rn, integral out in physics.  Air Transport Business  aw and its regulations, civil aviation organizations, IATA, ICAO, ERA, BSP, research of market in air transport, advertising, so	ial of function, partial derivitory over curves and surfaces in KZ chedules, tickets booking a	ations, implici R3, application 3 nd selling,
Metric spaces, see lefined functions, of integral calculu- 21OPC Ezech aviation lave eservation syster ole, CAA and its	equences in metric spaces, limit of sequence in metric space. Differential calculus of functions of several variables, differential, extremes of functions of several variables. Integral calculus of function of several variables, Riemann integral in Rn, integral out in physics.  Air Transport Business  aw and its regulations, civil aviation organizations, IATA, ICAO, ERA, BSP, research of market in air transport, advertising, so tems, rebooking, cancellations, international tickets, MCO, foreign agencies and booking offices, international air transporters	ial of function, partial derivitory over curves and surfaces in KZ chedules, tickets booking a	ations, implici R3, application 3 nd selling,
Metric spaces, se- defined functions, of integral calculu- 21OPC Czech aviation lave eservation syster ole, CAA and its	equences in metric spaces, limit of sequence in metric space. Differential calculus of functions of several variables, differential, extremes of functions of several variables. Integral calculus of function of several variables, Riemann integral in Rn, integral of us in physics.    Air Transport Business   Air Transport Business	ial of function, partial derivence over curves and surfaces in KZ chedules, tickets booking a sagreements, Ministry of T	ations, implici R3, application 3 nd selling, ransport and
Metric spaces, sedefined functions, of integral calculus 210PC Czech aviation laveservation systemole, CAA and its 18TM 20TVC2	equences in metric spaces, limit of sequence in metric space. Differential calculus of functions of several variables, differential, extremes of functions of several variables. Integral calculus of function of several variables, Riemann integral in Rn, integral of us in physics.    Air Transport Business   Air Transport Business	ial of function, partial derivous cover curves and surfaces in KZ chedules, tickets booking as agreements, Ministry of Taylor.	ations, implici R3, application 3 and selling, ransport and 4 1
Metric spaces, sedefined functions, of integral calculus 210PC Czech aviation law esservation systemole, CAA and its 18TM 20TVC2 Practical instruction	equences in metric spaces, limit of sequence in metric space. Differential calculus of functions of several variables, differential, extremes of functions of several variables. Integral calculus of function of several variables, Riemann integral in Rn, integral of us in physics.    Air Transport Business   Air Transport Business	ial of function, partial derivous cover curves and surfaces in KZ chedules, tickets booking as agreements, Ministry of Taylor.	ations, implici R3, application 3 and selling, ransport and 4 1
Metric spaces, sedefined functions, of integral calculus 210PC Czech aviation law eservation systemole, CAA and its 18TM 00TVC2 Practical instruction ennis, squash, flo	equences in metric spaces, limit of sequence in metric space. Differential calculus of functions of several variables, differential, extremes of functions of several variables. Integral calculus of function of several variables, Riemann integral in Rn, integral outs in physics.    Air Transport Business   Air Transport Business	ial of function, partial derivous cover curves and surfaces in KZ chedules, tickets booking as agreements, Ministry of Taylor.	ations, implici R3, application 3 and selling, ransport and 4 1
Metric spaces, sedefined functions, of integral calculus 210PC Czech aviation law reservation systemole, CAA and its 18TM 00TVC2 Practical instruction, squash, flo	equences in metric spaces, limit of sequence in metric space. Differential calculus of functions of several variables, differential, extremes of functions of several variables. Integral calculus of function of several variables, Riemann integral in Rn, integral calculus in physics.    Air Transport Business	ial of function, partial derivous cover curves and surfaces in KZ chedules, tickets booking a sagreements, Ministry of TZ,ZK Z cluded are: basketball, volle	ations, implici R3, application 3 and selling, ransport and 4 1 eyball, soccer,
Metric spaces, sedefined functions, of integral calculus 210PC Czech aviation law reservation system role, CAA and its 18TM 20TVC2 Practical instruction	equences in metric spaces, limit of sequence in metric space. Differential calculus of functions of several variables, differential, extremes of functions of several variables. Integral calculus of function of several variables, Riemann integral in Rn, integral calculus in physics.    Air Transport Business	ial of function, partial derivous cover curves and surfaces in KZ Chedules, tickets booking a sagreements, Ministry of T Z,ZK Z Chedules are: basketball, volle ZK	ations, implicit R3, application 3 and selling, ransport and 4 1 ryball, soccer, 3
Metric spaces, sedefined functions, of integral calculus 210PC Czech aviation law esservation systemole, CAA and its 18TM 00TVC2 Practical instruction ennis, squash, floe 21ZENP 21ZETP	equences in metric spaces, limit of sequence in metric space. Differential calculus of functions of several variables, differential calculus of functions of several variables, differential calculus of functions of several variables, Riemann integral in Rn, integral calculus in physics.    Air Transport Business	ial of function, partial derivous cover curves and surfaces in KZ chedules, tickets booking a sagreements, Ministry of T  Z,ZK Z cluded are: basketball, volle  ZK Z,ZK KZ	ations, implicit R3, applications, implicit R3, applications R3, applications R3, applications R3, applications R4, applications R4, applications R4, applications R4, applications R5, applications R6, applicati

Code of the group: 3.S.PP-05/06

Name of the group: 3.s.PP prez.bak.od05/06

Requirement credits in the group: In this group you have to gain 30 credits

Requirement courses in the group: In this group you have to complete at least 7 courses

Credits in the group: 30 Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
11FZL2	Physics for Aviation 2	Z,ZK	5	2+2		Z
21LPNV	FR Flights, Night-time Flying and Multiengine Aircraft Flying	KZ	5	3+1		Z
21LRT	Radio Technology in Aviation	Z,ZK	4	3+1		Z
21LMO	Aircraft Engines	Z,ZK	4	3+1		Z
21LPY1	Requirements in Aviation 1	Z,ZK	4	2+1		Z
21ON	General Navigation	KZ	4	3+1		Z
21RTS	Radio Communication	Z,ZK	4	2+1		Z

11FZL2	Physics for Aviation 2	Z,ZK	5				
Electric Current. Ma	gnetic field. Electromagnetic Induction. Electromagnetic Waves, Light. Geometric Optics, Physical Optics. Interaction of Radiation	n with Matter. Qua	ntization. Atom				
Solid State Physics.	Semiconductors.						
21LPNV	1LPNV FR Flights, Night-time Flying and Multiengine Aircraft Flying KZ 5						
21LRT	Radio Technology in Aviation	Z,ZK	4				
Electric signals and	the wave spectrum, modulations - amplitude, frequency and phase, impulse modulation, resonance circuits, electromagnetic field	d, wave range in a	viation, radiatio				
and reception of ele	ctromagnetic field, antennas in aviation, receivers and transmitters, basic navigation parameters and their measurements, princi	ples of measurem	nents of angle				
navigation paramete	rs, distance, altitude, speed, drift angle, hyperbolic navigation system, Earth's satellites, GPS, ground radio navigation systems,	NDB, VOR, DVO	R, TVOR, DME				
ILS, MLS, radioloca	ion in aviation, monitors in aviation  \r\nThe lector of this subject has to have passed an exam at CAA following	JAR - FCL 1.					
041.140	1						
21LMO	Aircraft Engines	Z,ZK	4				
_	Aircraft Engines Il principles, energetic demands of plane powering, energy transformations, ecology aspects, engines and their classification, pis	, ,					
Introduction, physical		ton engines - eng	ine construction				
Introduction, physical	al principles, energetic demands of plane powering, energy transformations, ecology aspects, engines and their classification, pis characteristics, jet engines - their classification, engine construction, heat circulation and characteristics, engine operation and m	ton engines - eng	ine construction				
Introduction, physical heat circulation and	al principles, energetic demands of plane powering, energy transformations, ecology aspects, engines and their classification, pis characteristics, jet engines - their classification, engine construction, heat circulation and characteristics, engine operation and m	ton engines - eng	ine construction				
Introduction, physical heat circulation and materials, engine programmed 21LPY1	al principles, energetic demands of plane powering, energy transformations, ecology aspects, engines and their classification, pis characteristics, jet engines - their classification, engine construction, heat circulation and characteristics, engine operation and mojecting.	ton engines - eng naintenance, tech	ine construction nology and use				
Introduction, physical heat circulation and materials, engine production to aviate the street of the	al principles, energetic demands of plane powering, energy transformations, ecology aspects, engines and their classification, pis characteristics, jet engines - their classification, engine construction, heat circulation and characteristics, engine operation and mojecting.  Requirements in Aviation 1	ton engines - eng naintenance, tech Z,ZK 18, scope of JAA	ine construction nology and use  4 (Joint Aviation				
Introduction, physiciheat circulation and materials, engine pi 21LPY1 Introduction to aviat Authority), JAR requ	al principles, energetic demands of plane powering, energy transformations, ecology aspects, engines and their classification, pischaracteristics, jet engines - their classification, engine construction, heat circulation and characteristics, engine operation and mojecting.  Requirements in Aviation 1 on requirements, scope of Civil Aviation Authority of Czech Republic, ICAO Annexes 1 - 18, Czech aviation requirements L1 - L	ton engines - eng naintenance, tech Z,ZK 18, scope of JAA	ine construction nology and use  4 (Joint Aviation				
Introduction, physiciheat circulation and materials, engine pi 21LPY1 Introduction to aviat Authority), JAR requ	al principles, energetic demands of plane powering, energy transformations, ecology aspects, engines and their classification, pist characteristics, jet engines - their classification, engine construction, heat circulation and characteristics, engine operation and mojecting.  Requirements in Aviation 1 on requirements, scope of Civil Aviation Authority of Czech Republic, ICAO Annexes 1 - 18, Czech aviation requirements L1 - Lirements FCL 1 (requirements for flight crews) and FCL 3 (medical fitness), JAR operation requirements for civil aviation, JAR requirements FCL 1 (requirements for civil aviation, JAR requirements for civil aviation and contract for civil aviation and civil av	ton engines - eng naintenance, tech Z,ZK 18, scope of JAA	ine construction nology and use  4 (Joint Aviation				
Introduction, physiciheat circulation and materials, engine pr 21LPY1 Introduction to aviat Authority), JAR requanalysis and explan 210N	al principles, energetic demands of plane powering, energy transformations, ecology aspects, engines and their classification, pist characteristics, jet engines - their classification, engine construction, heat circulation and characteristics, engine operation and mojecting.  Requirements in Aviation 1 on requirements, scope of Civil Aviation Authority of Czech Republic, ICAO Annexes 1 - 18, Czech aviation requirements L1 - L irements FCL 1 (requirements for flight crews) and FCL 3 (medical fitness), JAR operation requirements for civil aviation, JAR requirements L2, L6, L10, L11, L14, L16, L4444, L8168.	ton engines - eng naintenance, tech  Z,ZK  18, scope of JAA uirements for aircr	ine construction nology and use 4 (Joint Aviation aft certifications				
Introduction, physiciheat circulation and materials, engine pr 21LPY1 Introduction to aviat Authority), JAR requanalysis and explan 21ON Earth - shape, circu	In principles, energetic demands of plane powering, energy transformations, ecology aspects, engines and their classification, pist characteristics, jet engines - their classification, engine construction, heat circulation and characteristics, engine operation and mojecting.  Requirements in Aviation 1  on requirements, scope of Civil Aviation Authority of Czech Republic, ICAO Annexes 1 - 18, Czech aviation requirements L1 - L irements FCL 1 (requirements for flight crews) and FCL 3 (medical fitness), JAR operation requirements for civil aviation, JAR requirements L2, L6, L10, L11, L14, L16, L4444, L8168.  General Navigation	ton engines - enginaintenance, tech  Z,ZK  18, scope of JAA uirements for aircr  KZ  oxodrome and ort	ine construction nology and use 4 (Joint Aviation aft certifications				
Introduction, physiciheat circulation and materials, engine pr 21LPY1 Introduction to aviat Authority), JAR requanalysis and explan 21ON Earth - shape, circuand projections, spt	al principles, energetic demands of plane powering, energy transformations, ecology aspects, engines and their classification, pist characteristics, jet engines - their classification, engine construction, heat circulation and characteristics, engine operation and mojecting.  Requirements in Aviation 1 on requirements, scope of Civil Aviation Authority of Czech Republic, ICAO Annexes 1 - 18, Czech aviation requirements L1 - Lirements FCL 1 (requirements for flight crews) and FCL 3 (medical fitness), JAR operation requirements for civil aviation, JAR requirements L2, L6, L10, L11, L14, L16, L4444, L8168.  General Navigation  merence and diameter, latitude and longitude, large and small circle, loxodrome and orthodrome, mathematical calculations of legical requirements and control of the cont	ton engines - enginaintenance, tech  Z,ZK  18, scope of JAA uirements for aircr  KZ  oxodrome and ort	ine construction nology and use 4 (Joint Aviation aft certifications				
Introduction, physiciheat circulation and materials, engine pr 21LPY1 Introduction to aviat Authority), JAR requanalysis and explan 21ON Earth - shape, circuand projections, spt	al principles, energetic demands of plane powering, energy transformations, ecology aspects, engines and their classification, pis characteristics, jet engines - their classification, engine construction, heat circulation and characteristics, engine operation and mojecting.  Requirements in Aviation 1 on requirements, scope of Civil Aviation Authority of Czech Republic, ICAO Annexes 1 - 18, Czech aviation requirements L1 - Lirements FCL 1 (requirements for flight crews) and FCL 3 (medical fitness), JAR operation requirements for civil aviation, JAR requirements L2, L6, L10, L11, L14, L16, L4444, L8168.  General Navigation  Inference and diameter, latitude and longitude, large and small circle, loxodrome and orthodrome, mathematical calculations of liere trigonometry, ICAO and Jeppeson maps, time calculations (UTC, GMT, LNT, ZT) and time zones, calculative navigation and	ton engines - enginaintenance, tech  Z,ZK  18, scope of JAA uirements for aircr  KZ  oxodrome and ort	ine construction nology and use 4 (Joint Aviation aft certifications				

correspondence. & lt; br> & lt; br> \r\nThe lectures are following the requirements for obtaining general radiotelephonist's certificate at Czech Telecommunication Office.

Code of the group: 4.S.PP05/06

Name of the group: 4.s.PP prez.bak.od05/06

Requirement credits in the group: In this group you have to gain 30 credits

<br&gt;&lt;br&gt;\r\nThe lector of this subject has to have passed an exam at CAA following JAR - FCL 1.

**Principles of Flight 1** 

Requirement courses in the group: In this group you have to complete at least 8 courses

Credits in the group: 30 Note on the group:

21ZLU1

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
15JPA4	Foreign Language - English 4	Z,ZK	3	0+2		Z
21LLA1	Aircraft 1	KZ	4	2+1		Z
21LPY2	Aviation Regulations 2	Z,ZK	4	2+1		Z
21MEO	Meteorology	KZ	4	2+2		Z
21PRE1	Flight Instruments 1	Z,ZK	4	3+1		Z
21R	Radionavigation	Z,ZK	5	3+2		Z
21RSL	Radio Communication in Practice	Z	2	0+2		Z

ΚZ

Ζ

Characteristics of the courses of this group of Study Plan: Code=4.S.PP05/06 Name=4.s.PP prez.bak.od05/06

15.IPA4 Foreign Language - English 4

The students of the Faculty of Transportation Sciences study two foreign languages one after another at the Department of Humanities. These courses aim at providing sufficient knowledge to communicate about every-day matters but also to read and write and discuss professional and specialised

issues.<br&gt;&amp;nbsp;&amp;nbsp;&amp;nbsp;&amp;nbsp;&amp;nbsp;Both gradually chosen language courses are ended with an exam (at the end of 4th and 8th semester; the TL (Air Traffic Control) specialisation students take an English exam only - at the end of 4th semester; the PP (Professional Pilot) specialisation students take two exams in English at the end of 4th and 6th semester). Those students who want to apply for the Air Traffic specializations are recommended to enrol "English language" as their first choice. This is, however, not a guarantee for being excepted in the project study.<br&gt;&amp;nbsp;&amp;nbsp;&amp;nbsp;&amp;nbsp;Our department provides courses in English, German, French and Russian at different levels. The courses are also taught in our multimedia laboratory.

21LLA1 Aircraft 1

Evolution of aircraft constructions, aircraft classification, basic parts of aircraft and their function, wings of low speed aircraft - construction scheme, shapes and components, wings of high speed aircraft, wings with changeable geometry, direct lift control, wing mechanization, increase of lift and drag, longitudinal stability and control, flaps, spoilers, interceptors, ailerons. <br&gt;&lt;br&gt;\r\nThe lector of this subject has to have passed an exam at CAA following JAR - FCL 1.

21LPY2 Aviation Regulations 2 Z.ZK

Introduction to aviation requirements, scope of Civil Aviation Authority of Czech Republic, ICAO Annexes 1 - 18, Czech aviation requirements L1 - L 18, scope of JAA (Joint Aviation Authority), JAR requirements FCL 1 (requirements for flight crews) and FCL 3 (medical fitness), JAR operation requirements for civil aviation, JAR requirements for aircraft certifications, analysis and explanation of requirements L2, L6, L10, L11, L14, L16, L4444, L8168.

Meteorology 21MEO

ΚZ

Composition of Earth atmosphere, International Standard Atmosphere, vertical changes, relations among pressure, density, temperature and altitude, pressure settings QNH, QFE, QFF, QME, air instability, atmospheric fronts, atmospheric precipitation and classification, turbulence, conditions, forces creating wind, cyclone and anticyclone, gradient wind, visibility in aviation, weather hazards, meteorological maps, climatology, circulation, intertropic front, meteo reports, meteorological organizations.

21PRE1 Flight Instruments 1 Z,ZK

Classification of instruments and their requirements, instrument panel layout depending on the type of aircraft, sensors and active parts, sources of electric power and power circuit on board, measuring of fuel pressure and oil temperature, measuring of cylinder head temperature and temperature of entering and exhaust gas, fuel system, total and immediate consumption, measuring of RPM and vibrations, construction control instruments, icing signalization, barometric instruments - altimeter, variometers, aerometric instruments - speedometer and mach meter, measuring of angle of impact and air temperature, methods of instrument use, instruments and pilot's attention.

Radionavigation 21R

Z,ZK

5 Navigational use of instruments (RC/NDB, VOR, DME, ILS, MLS), space navigation, astronavigation and satellite navigation. <br&gt;\lambda!t;

passed an exam at CAA following JAR - FCL 1.

Shortcuts used in air traffic, Q - codes, message categories, transmitting letters, numbers and times in aviation, standard words and phrases, important phrases used in meteorological reports, emergency procedures, procedures for VFR flights, procedures for IFR flights, procedures following requirements L10 and L4444.

217LU1 Principles of Flight 1 ΚZ

Aerodynamic drag, relation between drag and speed, air flow, formula of continuity, formula of Bernoulli, lift and drag, air flow and pressures around wing, angle of attack, reactions of a wing in air flow, lift and drag of a wing and a aircraft, coefficient of lift and drag, critical angle of attack, wing with final span, induced drag, interference, devices for lift and drag increase <br&gt;&lt;br&gt;\r\nThe lector of this subject has to have passed an exam at CAA following JAR - FCL 1.

Code of the group: 5.S.PP-08/09

Name of the group: 5.s.PP prez.bak.od08/09

Radio Communication in Practice

Requirement credits in the group: In this group you have to gain 30 credits

Requirement courses in the group: In this group you have to complete at least 9 courses

Credits in the group: 30

Note on the group:

21RSL

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
21CLP	Training in the Laboratory of Flight Planning and Monitoring	Z	2	0+2		Z
21CN	Flight Navigation Training	KZ	2	0+2		Z
15JA5	Foreign Language - English 5	Z	2	0+2		Z
21LVPM	Multiengine Aircraft and Multicrew Cooperation	KZ	4	3+1	L	Z
21LMEO	Meteorology in Aviation	Z,ZK	3	1+1		Z
21LTTE	Aerodromes	Z,ZK	4	2P+1C+12B	L	Z
21PPJ2	Flight Instruments 2	Z,ZK	4	3+1		Z
21PAP1	Flight Planning and Monitoring 1	KZ	5	3+1		Z
21ZLE2	Principles of Flight 2	Z,ZK	4	2+1	Z	Z

Characteristics of the courses of this group of Study Plan: Code=5.S.PP-08/09 Name=5.s.PP prez.bak.od08/09

21CLP	Training in the Laboratory of Flight Planning and Monitoring	Z	2
21CN	Flight Navigation Training	KZ	2
15JA5	Foreign Language - English 5	Z	2

The students of the Faculty of Transportation Sciences study two foreign languages one after another at the Department of Humanities. These courses aim at providing sufficient knowledge to communicate about every-day matters but also to read and write and discuss professional and specialised issues. <br&gt; Both gradually chosen language courses are ended with an exam (at the end of 4th and 8th semester; the TL (Air Traffic Control) specialisation students take an English exam only - at the end of 4th semester; the PP (Professional Pilot) specialisation students take two exams in English - at the end of 4th and 6th semester). Those students who want to apply for the Air Traffic specializations are recommended to enrol "English language" as their first choice. This is, however, not a guarantee for being excepted in the project study.<br&gt; Our department provides courses in English, German, French and Russian at different levels. The courses are also taught in our multimedia laboratory.

21LVPM Multiengine Aircraft and Multicrew Cooperation Coordination directive with regard to FTOs for practical training, and concurrently meeting requirements for multicrew cooperation according to Ammedment 1 JAR- FCL1 261(d)- MCC. The scope is determined in compliance with AMC FCL 1.261(d). 21LMEO Meteorology in Aviation Z,ZK Composition of Earth atmosphere, International Standard Atmosphere, vertical changes, relations among pressure, density, temperature and altitude, pressure settings QNH, QFE, QFF, QME, air instability, atmospheric fronts, atmospheric precipitation and classification, turbulence, conditions, forces creating wind, cyclone and anticyclone, gradient wind, visibility in aviation, weather hazards, meteorological maps, climatology, circulation, intertropic front, meteo reports, meteorological organizations. <br&gt;\klt;br&gt;\klt;br&gt;\r\nThe lector of this subject has to have passed an exam at CAA following JAR - FCL 1. 21LTTE Aerodromes Aerodrome reference point and temperature, TORA, TODA, ASDA, LDA. Taxiway and apron. Clearway. Stopway. Obstacle limitation surfaces. Runway marking. Runway zone lights. Environmental conditions. Public traffic. 21PPJ2 Flight Instruments 2 7.7K Practical habits of pilots, making decision in emergency situations, complex aerometric systems, mechanical gyroscopes, types and characteristics, artificial horizon, corrections, turn

and slip indicators, acceleration meters, magnetic compasses, sensors of Earth's magnetic field, gyroscopic direction indicator, inertial navigation system, acceleration meters of inertial systems, laser gyroscopes, inertial course vertical indicator, signal processing, block setting of inertial systems, complex processing of flight and navigation parameters, cockpit monitors

21PAP1 Flight Planning and Monitoring 1 ΚZ 5

Weight, balance, load, center of gravity, efficiency - single engine planes, efficiency - multiengine planes. <br&gt;&lt;br&gt;\r\nThe lector of this subject has to have passed an exam at CAA following JAR - FCL 1.

Principles of Flight 2

Ways of producing thrust, propeller, jet propulsion, thrust and momentum, propulsion efficiency, aerodynamics of fixed and variable pitch propeller, propeller operation modes, propeller airstream effect, gyroscopic effect, balance of forces in horizontal flight, glide and landing, performances, take off and climb, acceleration, positive load, manoeuvres, stability and controllability, transsonic speeds.

Code of the group: 6.S.PP08/09

Name of the group: 6.s.PP prez.bak.od08/09

Requirement credits in the group: In this group you have to gain 30 credits

Requirement courses in the group: In this group you have to complete at least 7 courses

Credits in the group: 30

Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
15JPA6	Foreign Language - English 6	Z,ZK	2	0+2		Z
21L2	Aircraft 2	Z,ZK	4	3+1		Z
21LO	Human Performance and Limitations	Z,ZK	5	3+2		Z
21PAP2	Flight Planning and Monitoring 2	Z,ZK	5	3+1		Z
21PLPP	IFR Flights Procedures	Z,ZK	4	2+1		Z
21PPU	Operational Procedures	Z,ZK	5	2+1		Z
21SBP1	Bachelor Thesis Seminar 1	KZ	5	0+5		Z

### Characteristics of the courses of this group of Study Plan: Code=6.S.PP08/09 Name=6.s.PP prez.bak.od08/09

15JPA6	Foreign Language - English 6	Z,ZK	2
The students of the Fac	ulty of Transportation Sciences study two foreign languages one after another at the Department of Humanities. These cours	es aim at providir	ng sufficient
knowledge to communic	ate about every-day matters but also to read and write and discuss professional and specialised		
issues.<:br>:&:r	bsp: : :  Both gradually chosen language courses are ended with an exam (at th	e end of 4th and 8	th semester: th

TL (Air Traffic Control) specialisation students take an English exam only - at the end of 4th semester; the PP (Professional Pilot) specialisation students take two exams in English at the end of 4th and 6th semester). Those students who want to apply for the Air Traffic specializations are recommended to enrol "English language" as their first choice. This is, however, not a guarantee for being excepted in the project study.<br&gt;&amp;nbsp;&amp;nbsp;&amp;nbsp;&amp;nbsp;Our department provides courses in English, German, French and Russian at different levels. The courses are also taught in our multimedia laboratory.

,	,						
21L2	Aircraft 2	Z,ZK	4				
Aircraft body, landing gear, tail, directional stability and control, problems with projects, performance envelope, load factor, technologies used in aircraft construction, materials used							
the annual and the second and an arrangement	to a cilianata a clastica dessit de control entre a cut fina entre a control entre a						

in construction, fuel system, oil system, electric circuit, ice control system, anti-fire system, control systems. 21LO Human Performance and Limitations

2 1 2 0	Transact Colombia	2,21				
Human factors in aviation, qualifications, limitations, accident statistics, flight safety, basic of physiology in aviation and health preserving. \t\n\The lector of this subject						
has to have passed an exam at CAA following JAR - FCL 1.						
0.4.0.4.0.0	EN LABOR TO LAM TO THE O	7 714				

ZTPAP2   Flight Flaming and Worldoning 2	, Z,ZK	5			
Flight plan ATC ICAO, practical flight planning, planning IFR flight (corridors), planning jet airplane flight, practical flight plan processing, <	br>\r\nThe lec	tor of this subject			
has to have passed an exam at CAA following JAR - FCL 1.					

has to have passed an	exam at CAA following JAR - FCL 1.		
21PLPP	1PLPP IFR Flights Procedures		
21PPU	Operational Procedures	Z,ZK	5
System of quality, fuel q			
21SBP1	Bachelor Thesis Seminar 1	KZ	5
21SBP1	Bachelor Thesis Seminar 1	KZ	5

Code of the group: 7S-PP-05/06

Name of the group: 7.s.PPod05/06-prezen ní

Requirement credits in the group: In this group you have to gain 30 credits

Requirement courses in the group: In this group you have to complete at least 2 courses

Credits in the group: 30

Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
21BPPP	Bachelor Thesis	Z	20	0+18		Z
21SB2	Bachelor Thesis Seminar 2	Z	10	0+8		Z

Characteristics of the courses of this group of Study Plan: Code=7S-PP-05/06 Name=7.s.PPod05/06-prezen ní

21BPPP	Bachelor Thesis	Z	20
21SB2	Bachelor Thesis Seminar 2	Z	10

### List of courses of this pass:

Code	Name of the course	Completion	Credits
00TVC1	Physical Education 1	Z	1
Practical instruction	on and training in a wide variety of sports and games: from basic recreational coaching to competitive top level training. Included are:	basketball, volleyb	all, soccer
	tennis, squash, floorball, bodybuilding, swimming, canoeing, aerobic.		
00TVC2	Physical Education 2	Z	1
Practical instruction	on and training in a wide variety of sports and games: from basic recreational coaching to competitive top level training. Included are:	basketball, volleyb	all, soccer
	tennis, squash, floorball, bodybuilding, swimming, canoeing, aerobic.		
11ATGR	Algebra and Graph Theory	Z,ZK	5
Vector spaces, v	ectors, linear independence, bases. Matrices, rank, trace, linear mapping, special matrices. System of linear equation. Eigenvectors a	nd eigenvalues of	matrices,
similar matrices, tl	ne characteristic matrix and characteristic polynomial of a matrix. Quadratic forms - diagonal form, associated symmetric matrix, signates	ature, Sylvester's I	nertia Lav
	Basic definitions of Graph Theory (oriented graphs, walk, trail, path, cycle, trees).		
11FZL1	Physics for Aviation 1	Z,ZK	5
	Kinematics. Dynamics. Thermodynamics. Electric field.		
11FZL2	Physics for Aviation 2	Z,ZK	5
lectric Current. M	agnetic field. Electromagnetic Induction. Electromagnetic Waves, Light. Geometric Optics, Physical Optics. Interaction of Radiation wit	h Matter. Quantiza	tion. Atom
	Solid State Physics. Semiconductors.		
11GMR	Geometry	Z,ZK	5
Topographic surf	aces, Orthogonal projection, axonometric projection (orthogonal axonometry, skew projection), perspective projection, curves - conic	sections, example	s of plane
curves, basics of d	ifferential geometry of curves: parameterization, arc of the the curve, torsion and curvature, Frenet's trihedron, surfaces of revolution,	quadrics, ruled qu	uadrics, et
11ML1	Mathematics for Aviation 1	Z,ZK	6
Real and comple	x numbers. Sequences, real function of real variable, composite and inverse functions, limits, continuity, derivatives, differentials, inver	stigation of function	ns for their
	properties. Integral calculus of functions of one variable with applications. Solution of ordinary differential equations, separation of variable with applications.	ariables.	
11ML2	Mathematics for Air Branches 2	Z,ZK	4
√letric spaces, seq	uences in metric spaces, limit of sequence in metric space. Differential calculus of functions of several variables, differential of functio	n, partial derivatio	ns, implicit
defined functions, e	extremes of functions of several variables. Integral calculus of function of several variables, Riemann integral in Rn, integral over curves	and surfaces in R3	, application
	of integral calculus in physics.		
14KPP1	Computer Aided Design 1 (AutoCAD Basic Steps)	KZ	3
Determination of "C	AD Systems" term. CAD task in system projecting model. Concurrent CAD system in Czech market. Basic AutoCAD course in 2D env	ronment, user sett	ings, outp
	options, designs with grid background.		
14ZI	Basic of Informatics	KZ	3
ntroduce to the fa	culty network and faculty information systems. Theory of information - basic terms. Number systems, conversions, analog / digital rep	resentation of the i	nformatio
Architecture and a	ctivity of the numerical computing systems. Algorithms and their graphical flowchart representation. Algorithm development and solut	ion finding by simp	ole progran
	languages. Engineer computation by specialized software - practical tasks. Classified credit examination.		
15J1A1	Foreign Language - English 1	Z	2
The students of	the Faculty of Transportation Sciences study two foreign languages one after another at the Department of Humanities. These course	s aim at providing	sufficient
nowledge to com	municate about every-day matters but also to read and write and discuss professional and specialised issues. Both gradu	ally chosen langua	age course
	an exam (at the end of 4th and 8th semester; the TL (Air Traffic Control) specialisation students take an English exam only - at the er		
•	ot) specialisation students take two exams in English - at the end of 4th and 6th semester). Those students who want to apply for the	•	
ecommended to e	enrol "English language" as their first choice. This is, however, not a guarantee for being excepted in the project study. Our	department provid	des course
	in English, German, French and Russian at different levels. The courses are also taught in our multimedia laboratory.		
15J1A2	Foreign Language - English 2	Z	2
The students of	the Faculty of Transportation Sciences study two foreign languages one after another at the Department of Humanities. These course	s aim at providing	sufficient

knowledge to communicate about every-day matters but also to read and write and discuss professional and specialised issues. <br&gt; Both gradually chosen language courses are ended with an exam (at the end of 4th and 8th semester; the TL (Air Traffic Control) specialisation students take an English exam only - at the end of 4th semester; the PP (Professional Pilot) specialisation students take two exams in English - at the end of 4th and 6th semester). Those students who want to apply for the Air Traffic specializations are

recommended to enrol "English language" as their first choice. This is, however, not a guarantee for being excepted in the project study.<br&gt; Our department provides courses in English, German, French and Russian at different levels. The courses are also taught in our multimedia laboratory. 15.IA5 Foreign Language - English 5 7 2 The students of the Faculty of Transportation Sciences study two foreign languages one after another at the Department of Humanities. These courses aim at providing sufficient knowledge to communicate about every-day matters but also to read and write and discuss professional and specialised issues. <br&gt; Both gradually chosen language courses are ended with an exam (at the end of 4th and 8th semester; the TL (Air Traffic Control) specialisation students take an English exam only - at the end of 4th semester; the PP (Professional Pilot) specialisation students take two exams in English - at the end of 4th and 6th semester). Those students who want to apply for the Air Traffic specializations are recommended to enrol "English language" as their first choice. This is, however, not a guarantee for being excepted in the project study.<br&gt; Our department provides courses in English, German, French and Russian at different levels. The courses are also taught in our multimedia laboratory. 15JPA4 Foreign Language - English 4 3 The students of the Faculty of Transportation Sciences study two foreign languages one after another at the Department of Humanities. These courses aim at providing sufficient knowledge to communicate about every-day matters but also to read and write and discuss professional and specialised issues.<br&gt;&amp;nbsp;&amp;nbsp;&amp;nbsp;&amp;nbsp;&amp;nbsp;Both gradually chosen language courses are ended with an exam (at the end of 4th and 8th semester; the TL (Air Traffic Control) specialisation students take an English exam only - at the end of 4th semester; the PP (Professional Pilot) specialisation students take two exams in English at the end of 4th and 6th semester). Those students who want to apply for the Air Traffic specializations are recommended to enrol "English language" as their first choice. This is, however, not a guarantee for being excepted in the project study.<br&gt;&amp;nbsp;&amp;nbsp;&amp;nbsp;&amp;nbsp;&amp;nbsp;Our department provides courses in English, German, French and Russian at different levels. The courses are also taught in our multimedia laboratory. 15JPA6 Foreign Language - English 6 Z.ZK 2 The students of the Faculty of Transportation Sciences study two foreign languages one after another at the Department of Humanities. These courses aim at providing sufficient knowledge to communicate about every-day matters but also to read and write and discuss professional and specialised issues.<br&gt;&amp;nbsp;&amp;nbsp;&amp;nbsp;&amp;nbsp;&amp;nbsp;Both gradually chosen language courses are ended with an exam (at the end of 4th and 8th semester; the TL (Air Traffic Control) specialisation students take an English exam only - at the end of 4th semester; the PP (Professional Pilot) specialisation students take two exams in English at the end of 4th and 6th semester). Those students who want to apply for the Air Traffic specializations are recommended to enrol "English language" as their first choice. This is, however, not a guarantee for being excepted in the project study.<br&gt;&amp;nbsp;&amp;nbsp;&amp;nbsp;&amp;nbsp;Our department provides courses in English, German, French and Russian at different levels. The courses are also taught in our multimedia laboratory. 17ZKP ΚZ Introduction to Law 2 Theoretical foundations of law. The rule of law. Constitutional law. Public law. Substantive and procedural civil law. Commercial law. Trading business. Building permit procedure. Criminal and violation law. Law of nations, European Union and community law. 18TDKL Technical Documentation in Aeroplane Design ΚZ 3 General principles, parts lists, handling of modification of Technical Documents, data exchange. Z,ZK 18TM Technical Mechanics 4 21BPPP **Bachelor Thesis** Ζ 20 21CLP Training in the Laboratory of Flight Planning and Monitoring Ζ 2 ΚZ 21CN Flight Navigation Training 2 Z,ZK 4 2112 Aircraft 2 Aircraft body, landing gear, tail, directional stability and control, problems with projects, performance envelope, load factor, technologies used in aircraft construction, materials used in construction, fuel system, oil system, electric circuit, ice control system, anti-fire system, control systems. Aircraft 1 Evolution of aircraft constructions, aircraft classification, basic parts of aircraft and their function, wings of low speed aircraft - construction scheme, shapes and components, wings of high speed aircraft, wings with changeable geometry, direct lift control, wing mechanization, increase of lift and drag, longitudinal stability and control, flaps, spoilers, interceptors, ailerons. <br&gt;&lt;br&gt;\r\nThe lector of this subject has to have passed an exam at CAA following JAR - FCL 1. Meteorology in Aviation Composition of Earth atmosphere, International Standard Atmosphere, vertical changes, relations among pressure, density, temperature and altitude, pressure settings QNH, QFE, QFF, QME, air instability, atmospheric fronts, atmospheric precipitation and classification, turbulence, conditions, forces creating wind, cyclone and anticyclone, gradient wind, visibility in aviation, weather hazards, meteorological maps, climatology, circulation, intertropic front, meteo reports, meteorological organizations. <br&gt;&lt;br&gt;\r\nThe lector of this subject has to have passed an exam at CAA following JAR - FCL 1. 21LMO Aircraft Engines Z,ZK Introduction, physical principles, energetic demands of plane powering, energy transformations, ecology aspects, engines and their classification, piston engines - engine construction, heat circulation and characteristics, jet engines - their classification, engine construction, heat circulation and characteristics, engine operation and maintenance, technology and used materials, engine projecting. 21LO **Human Performance and Limitations** 5 Human factors in aviation, qualifications, limitations, accident statistics, flight safety, basic of physiology in aviation and health preserving. <br&gt;&lt;br&gt;\r\nThe lector of this subject has to have passed an exam at CAA following JAR - FCL 1. 21LPNV FR Flights, Night-time Flying and Multiengine Aircraft Flying ΚZ 5 Requirements in Aviation 1 4 Introduction to aviation requirements, scope of Civil Aviation Authority of Czech Republic, ICAO Annexes 1 - 18, Czech aviation requirements L1 - L 18, scope of JAA (Joint Aviation Authority), JAR requirements FCL 1 (requirements for flight crews) and FCL 3 (medical fitness), JAR operation requirements for civil aviation, JAR requirements for aircraft certifications, analysis and explanation of requirements L2, L6, L10, L11, L14, L16, L4444, L8168. Aviation Regulations 2 Introduction to aviation requirements, scope of Civil Aviation Authority of Czech Republic, ICAO Annexes 1 - 18, Czech aviation requirements L1 - L 18, scope of JAA (Joint Aviation Authority), JAR requirements FCL 1 (requirements for flight crews) and FCL 3 (medical fitness), JAR operation requirements for civil aviation, JAR requirements for aircraft certifications, analysis and explanation of requirements L2, L6, L10, L11, L14, L16, L4444, L8168. Radio Technology in Aviation Electric signals and the wave spectrum, modulations - amplitude, frequency and phase, impulse modulation, resonance circuits, electromagnetic field, wave range in aviation, radiation and reception of electromagnetic field, antennas in aviation, receivers and transmitters, basic navigation parameters and their measurements, principles of measurements of angle navigation parameters, distance, altitude, speed, drift angle, hyperbolic navigation system, Earth's satellites, GPS, ground radio navigation systems, NDB, VOR, DVOR, TVOR, DME, ILS, MLS, radiolocation in aviation, monitors in aviation<br&gt;&lt;br&gt;\r\nThe lector of this subject has to have passed an exam at CAA following JAR - FCL 1. 21LTTE Aerodromes Aerodrome reference point and temperature, TORA, TODA, ASDA, LDA. Taxiway and apron. Clearway. Stopway. Obstacle limitation surfaces. Runway marking. Runway zone lights. Environmental conditions. Public traffic.

21LVPM	Multiengine Aircraft and Multicrew Cooperation	KZ	4
Coordination direct	ive with regard to FTOs for practical training, and concurrently meeting requirements for multicrew cooperation according to Ammedment	nt 1 JAR- FCL1.2	61(d)- MCC.
241450	The scope is determined in compliance with AMC FCL 1.261(d).		
21MEO	Meteorology arth atmosphere, International Standard Atmosphere, vertical changes, relations among pressure, density, temperature and altitude, p	KZ	4
•	ability, atmospheric fronts, atmospheric precipitation and classification, turbulence, conditions, forces creating wind, cyclone and antic	ŭ	
, ,	in aviation, weather hazards, meteorological maps, climatology, circulation, intertropic front, meteo reports, meteorological organic		, , , ,
210N	General Navigation	KZ	4
•	umference and diameter, latitude and longitude, large and small circle, loxodrome and orthodrome, mathematical calculations of loxo		
and proje	ections, sphere trigonometry, ICAO and Jeppeson maps, time calculations (UTC, GMT, LNT, ZT) and time zones, calculative navigatic pilotage.  \r\nThe lector of this subject has to have passed an exam at CAA following JAR - FCL 1.	n and navigation i	by
210PC	Air Transport Business	KZ	3
	aw and its regulations, civil aviation organizations, IATA, ICAO, ERA, BSP, research of market in air transport, advertising, schedules,		
reservation system	is, rebooking, cancellations, international tickets, MCO, foreign agencies and booking offices, international air transporters agreement	s, Ministry of Trans	sport and its
	role, CAA and its role, international and national aviation associations.		
21PAP1	Flight Planning and Monitoring 1	KZ	5
Weight, balance, lo	pad, center of gravity, efficiency - single engine planes, efficiency - multiengine planes. \klt;br>\r\nThe lector of this subject at CAA following JAR - FCL 1.	has to have pass	ed an exam
21PAP2	Flight Planning and Monitoring 2	Z.ZK	5
	AO, practical flight planning, planning IFR flight (corridors), planning jet airplane flight, practical flight plan processing, <br&< td=""><td>,</td><td>_</td></br&<>	,	_
	has to have passed an exam at CAA following JAR - FCL 1.	•	,
21PLPP	IFR Flights Procedures	Z,ZK	4
21PPJ2	Flight Instruments 2	Z,ZK	4
	pilots, making decision in emergency situations, complex aerometric systems, mechanical gyroscopes, types and characteristics, arti		
	acceleration meters, magnetic compasses, sensors of Earth's magnetic field, gyroscopic direction indicator, inertial navigation system, oscopes, inertial course vertical indicator, signal processing, block setting of inertial systems, complex processing of flight and navigation		
systems, laser gyro	and displays, head-up displays.	i parameters, cocr	CPIC IIIOIIIIOI3
21PPU	Operational Procedures	Z,ZK	5
	System of quality, fuel quantity needed for given flight and given aircraft, MTOW, MNPS NAT.	<b>—,—</b> :	' '
21PRE1	Flight Instruments 1	Z,ZK	4
	struments and their requirements, instrument panel layout depending on the type of aircraft, sensors and active parts, sources of elect		
	ng of fuel pressure and oil temperature, measuring of cylinder head temperature and temperature of entering and exhaust gas, fuel s suring of RPM and vibrations, construction control instruments, icing signalization, barometric instruments - altimeter, variometers, aerome		
consumption, meas	and mach meter, measuring of angle of impact and air temperature, methods of instrument use, instruments and pilot's attent		pecdometer
21R	Radionavigation	Z,ZK	5
	f instruments (RC/NDB, VOR, DME, ILS, MLS), space navigation, astronavigation and satellite navigation.  \r\nThe le		has to have
	passed an exam at CAA following JAR - FCL 1.		
21RSL	Radio Communication in Practice	Z	2
Shortcuts used in a	air traffic, Q - codes, message categories, transmitting letters, numbers and times in aviation, standard words and phrases, important p reports, emergency procedures, procedures for VFR flights, procedures for IFR flights, procedures following requirements L10 and		eteorological
21RTS	Radio Communication	Z,ZK	4
	pelling alphabet, Czech radio telecommunication law, telecommunication secret, radio communication operation, radio communication	,	1 1
	nce. \klt;br>\r\nThe lectures are following the requirements for obtaining general radiotelephonist's certificate at Czech Tel	•	I
	  \r\nThe lector of this subject has to have passed an exam at CAA following JAR - FCL 1.		
21SB2	Bachelor Thesis Seminar 2	Z	10
21SBP1	Bachelor Thesis Seminar 1	KZ	5
21TPV	Essential Theory for Starting Pilot Training	Z,ZK	5
	e based on experiences from FTO and will be approved by CAA. The lectures are recommended for beginners and content necessary le de areas of lectures are air traffic and requirements, aircraft, flight planning, human endurance and limitations, meteorology, navigation		
	ication.  \r\nOnly total beginners will be taking optional Theory for pilot's training beginning class. Pilot license holder	-	-
	to sign for this class.	, ,	´
21ZENP	Basics of Aircraft Electronics	ZK	3
21ZETP	Basics of Aircraft Electronics	Z,ZK	3
21ZLE2	Principles of Flight 2	Z,ZK	4
	thrust, propeller, jet propulsion, thrust and momentum, propulsion efficiency, aerodynamics of fixed and variable pitch propeller, propel	-	
airstream effect,	gyroscopic effect, balance of forces in horizontal flight, glide and landing, performances, take off and climb, acceleration, positive load controllability, transsonic speeds.	ı, manoeuvres, sta	ability and
21ZLU1	Principles of Flight 1	KZ	4
	ן r הוסוקופט סדר הוקרוניה. , relation between drag and speed, air flow, formula of continuity, formula of Bernoulli, lift and drag, air flow and pressures around win		
	ft and drag of a wing and a aircraft, coefficient of lift and drag, critical angle of attack, wing with final span, induced drag, interference, de		

For updated information see <a href="http://bilakniha.cvut.cz/en/FF.html">http://bilakniha.cvut.cz/en/FF.html</a> Generated: day 2024-03-29, time 06:33.

 $\< br\&gt; \&lt; br\&gt; \label{eq:likelihood} \label{eq:likelihood} AR - FCL \ 1.$