



Technische  
Hochschule  
Wildau  
*Technical University  
of Applied Sciences*

## Degree course

### "Aviation Management (AVIMA)"

### Master of Aviation Management (Part time career)

## Programme description



As of May 2024

**For the academic year 2024**

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## Profile



Die Luftfahrt ist weltweit eine der am dynamischsten und schnellwachsensten Industrien. Diese Marktsignale geben Anlaß für einen optimistischen Ausblick: Die strategisch und technologisch wichtige und vor allem für die moderne Gesellschaft unverzichtbare Luftfahrtindustrie wächst stetig weiter. Mit einer weltweiten Wachstumsrate von fünf Prozent ist dieser Industriezweig durchaus geeignet, einen neuen wirtschaftlichen „Boom“ auszulösen.

Neue, junge, motivierte und spezialisierte Arbeitskräfte mit fundiertem Wissen in Aviation Management werden dringend auf dem Arbeitsmarkt benötigt. Dies lässt auf zeitnahen erforderlichen Bedarf an gut ausgebildeten Spezialisten aus unterschiedlichen Fachbereichen in dieser Branche schließen.◀

Unsere Antwort auf die neu entstehenden Bildungsmärkte ist ein dynamisch zugeschnittenes, internationales Studienprogramm: „AVIMA - Master in Aviation Management“

## Aviation Management (AVIMA) - Matrix - Part time career

Module name	PA	Sem.	CP	V	Ü	L	P	S	Tot.
<b>Importiert P - Compulsory</b>									
Aviation Engineering	SMP	1	8	30	32	0	0	0	62
Aviation Law	SMP	1	8	20	28	0	0	0	48
Business Administration	SMP	1	10	40	44	0	0	0	84
Civil Aviation	SMP	1	9	30	32	0	0	0	62
General Management Skills	SMP	1	10	40	44	0	0	0	84
Leadership Skills	SMP	1	8	20	26	0	0	0	46
Aviation Management	SMP	2	10	40	40	0	0	0	80
Master Thesis Workshop	SMP	3	3	12	0	0	0	0	12
Kolloquium	SMP	4	4	1	0	0	0	0	1
<b>120 - Elective</b>									
Advanced Research Methods	SMP	1	5	20	22	0	14	0	56
European Law and Policy	SMP	1	5	25	33	0	0	0	58
Case Study	SMP	2	5	2	0	0	30	0	32
Work Practice Internship	SMP	3	5	16	0	0	0	0	16
<b>Academic credits</b>									
Master Thesis	SMP	4	20						
<b>Total presence hours</b>				233	246	0	0	0	479
<b>Total credit points to be achieved from WPM</b>			0						
<b>Total credit points from PM</b>			70						
<b>Sum of academic achievements</b>			20						
<b>Total credit points</b>			90						

V - Lesson

Ü - Exercise

L - Laboratory

P - Project

PA - Examination type

CP - Credit Points

PM - Compulsory modules

WPM - Elective modules

SPM - Specialization modules

SMP - Examination during the semester

KMP - Combined module examination

FMP - Fixed module examination

## Aviation Engineering

Module name <b>Aviation Engineering</b>			
Degree course <b>Aviation Management (AVIMA)</b>		Degree <b>Master of Aviation Management</b>	
Module responsible(s) <b>Dipl.-Ing. Michael Hans-Reichel</b>			
As of <b>2023-04-26</b>		Language <b>English</b>	
Type <b>Compulsory</b>	Examination type <b>SMP</b>	CP according to ECTS <b>8</b>	
Study type <b>Part time career</b>	Semester <b>1</b>	Presence <b>62</b>	L / E / L / P / S <b>30 / 32 / 0 / 0 / 0</b>

Recommended prerequisites <b>Basic knowledge of mathematics and physics, report writing, literature research</b>
Special regulations

Workload breakdown				
Presence <b>62,0 h</b>	Self-study <b>132,0 h</b>	Projects <b>0,0 h</b>	Exam <b>6,0 h</b>	Total <b>200 h</b>

Learning objectives
Knowledge
<ul style="list-style-type: none"> <li>– Students gain an understanding of the physical fundamentals of aircraft and the specific challenges of the aviation industry in the area of design, manufacturing and aftermarket support and maintenance</li> </ul>
Skills
<ul style="list-style-type: none"> <li>– The students can contribute to decisions concerning new programmes and maintenance concepts.</li> </ul>
Social
<ul style="list-style-type: none"> <li>– The students support each other in the learning process as some of them come from a non-technical background in their primary degree.</li> </ul>
Autonomy
<ul style="list-style-type: none"> <li>– The students discover ways of dealing with their individual strengths and weaknesses.</li> </ul>

## Aviation Engineering

### Content

1. Aviation Technology, the physics of flying, analysis of operating forces, aerodynamics, construction and performance data, flying stability, propulsion systems, materials.
2. Manufacturing Management Programme planning, certification, design, development, testing, supply chain management, programme partners and risk-sharing, customer care and service, manufacturing logistics in aviation industry, design of production facilities, production planning and scheduling.
3. Maintenance Management (drivers, objectives, concepts), Safety in Aerospace Design and Maintenance, Development of maintenance programmes, MRO Business Models, Servitisation, Product Service Systems

### Compulsory literature

- Etkin, B & Duff Reid, L. (1995). *Dynamics of Flight: Stability and Control*. Wiley.
- Kinnison, H & Siddiqui, T. (2013). *[(Aviation Maintenance Management)] [ By (author) Harry A. Kinnison, By (author) Tariq Siddiqui ] [January, 2013]*. MCGRAW-HILL Professional.
- Lawrence, P & Braddon, D. (1999). *Strategic Issues in European Aerospace*. Ashgate.
- Complex Engineering Service Systems, Concepts and Research, Ng, I., Parry, G., Wild, P., McFarlane, D., Tasker, P. (Eds.)
- Integrated Vehicle Health Management: Perspectives on an Emerging Field, Ian K Jennions, SAE International
- The RCM Solution: A Practical Guide for Achieving Powerful Results Hardcover, Nancy Regan
- Airlines for America (A4A) MSG-3: Operator/Manufacturer Scheduled Maintenance Development, Volume 1 - Fixed Wing Aircraft; Volume 2 - Rotorcraft, Rev 2015.1

### Suggested literature

- Brockhaus, R, Alles, W & Luckner, R. (2011). *Flugregelung* (3., neu bearb. Aufl.). Heidelberg [u.a.] : Springer.
- Delfmann, W. (2008). *Strategic management in the aviation industry*. Köln: Kölner Wiss.-Verl..
- Wald, A. (2007). *Aviation-Management : aktuelle Herausforderungen und Trends*. Berlin [u.a.] : LIT-Verl.
- (2011). *Security : safeguarding international civil aviation against acts of unlawful interference ; international standards and recommended practices; Grundwerk* (9. ed.). Montreal.

## Aviation Law

Module name <b>Aviation Law</b>		
Degree course <b>Aviation Management (AVIMA)</b>	Degree <b>Master of Aviation Management</b>	
Module responsible(s) <b>Dr. Frank Fuchs</b>		
As of <b>2021-05-05</b>	Language <b>English</b>	
Type <b>Compulsory</b>	Examination type <b>SMP</b>	CP according to ECTS <b>8</b>

Study type <b>Part time career</b>	Semester <b>1</b>	Presence <b>48</b>	L / E / L / P / S <b>20 / 28 / 0 / 0 / 0</b>
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Recommended prerequisites
Special regulations

Workload breakdown				
Presence <b>48,0 h</b>	Self-study <b>100,0 h</b>	Projects <b>52,0 h</b>	Exam <b>0,0 h</b>	Total <b>200 h</b>

Learning objectives
<p>Knowledge</p> <ul style="list-style-type: none"> <li>– The students gain knowledge concerning the key terms, content and background of aviation law and additional relevant statutory sources, e.g. consumer law. The students understand, analyze and apply national and international laws and rules.</li> </ul> <p>Skills</p> <ul style="list-style-type: none"> <li>– The students are able to understand complex legal or political texts, to summarise, analyse and discuss them from their own point of view. The students can evaluate legal problems and their consequences and consider these in their decision-making process.</li> </ul> <p>Social</p> <ul style="list-style-type: none"> <li>– The students work in small teams on case studies.</li> </ul> <p>Autonomy</p> <ul style="list-style-type: none"> <li>– The students learn to analyse legal problems in the aviation industry independently.</li> </ul>

## Aviation Law

### Content

1. Law of International Air Carriage International legal frameworks in aviation, Montreal Agreement, Warsaw Agreement, role of the European Union, manned and unmanned aviation.
2. Civil Legal Framework national, European and international legal norms; Transferring international standards into national laws; institutions and authorities; liability problems in aviation.

### Compulsory literature

- Diederiks-Verschoor, I. (2006). *An introduction to air law* (8. rev. ed.). The Hague : Kluwer Law Internat.

### Suggested literature

- B. Larsen, P, Gillick, J & Sweeney, J. (2012). *Aviation Law: Cases, Laws and Related Sources: Second Edition*. Martinus Nijhoff Publishers.
- Schwenk, W, Giemulla, E & Schyndel, H. (2013). *Handbuch des Luftverkehrsrechts* (4. Aufl.). Köln ; München [u.a.] : Heymanns.
- M. Jarvis, R. (2006). *Aviation Law: Cases and Materials*. Carolina Academic Press.
- Stephen Dempsey, P. (2004). *European Aviation Law*. Kluwer Law International.



## Business Administration

Module name <b>Business Administration</b>			
Degree course <b>Aviation Management (AVIMA)</b>		Degree <b>Master of Aviation Management</b>	
Module responsible(s) <b>Budilov-Nettelmann, Nikola Fee</b>			
As of <b>2021-02-16</b>		Language <b>English</b>	
Type <b>Compulsory</b>	Examination type <b>SMP</b>	CP according to ECTS <b>10</b>	
Study type <b>Part time career</b>	Semester <b>1</b>	Presence <b>84</b>	L / E / L / P / S <b>40 / 44 / 0 / 0 / 0</b>

Recommended prerequisites <b>Fundamentals of business administration.</b>
Special regulations

Workload breakdown				
Presence <b>84,0 h</b>	Self-study <b>156,0 h</b>	Projects <b>0,0 h</b>	Exam <b>10,0 h</b>	Total <b>250 h</b>

Learning objectives
Knowledge
– The students acquire comprehensive knowledge concerning current business problems and solutions in an international context.
Skills
– The students learn how to analyse company data and subsequently to make appropriate business decisions.
Social
– The students gain an understanding of various goals and priorities in business decision-making processes and to find appropriate business solutions in groups.
Autonomy
– The students are capable of making important business decisions and assume responsibility for these choices.

## Business Administration

### Content

1. Financial Accounting: Accounting as a Language of Business, Basic Financial Statements and the Underlying Principles (Accruals and Deferrals, Recognition of Assets and Liabilities, Measurement), Reporting Financial Results / Annual Report, Financial Statement Analysis
2. Managerial Accounting (Internal Performance Measurement, Pricing and Budgeting): Forms of cost accounting, marginal income, planning and supervision, concepts of financial controlling.
3. Corporate Finance: Equity and borrowed capital, capital costs, stocks, bonds and loans as source of financing, company valuation
4. Marketing Fundamentals of Marketing, marketing strategies, analysis concepts, marketing mix, product life cycle.

### Compulsory literature

- A. Brealey, R & C. Myers, S. (2014). *Principles of Corporate Finance, 7th Edition*. McGraw-Hill Irwin.
- Williams, Haka, Carcello, Bettner (2020). *Financial Accounting. The Basis for Business Decisions*, MacGraw-Hill Education
- C. Ferrell, O & Hartline, M. (2012). *Marketing Strategy*. Cengage Learning.
- R. Cateora, P. (2013). *International Marketing*. Cram101 Textbook Reviews.

### Suggested literature

- Strategic performance management : accounting for organizational control (2018) Adler, Ralph William London ; New York : Routledge
- Activity Based Costing for Construction Companies Deckblatt von Yong-Woo Kim VERLAG John Wiley & Sons, Incorporated Chapter 2
- The master guide to controllers' best practices / (2020) Stattler, Elaine, [editor.] ; Grabel, Joyce Anne, [editor.] Hoboken, New Jersey:Wiley
- Westerfield, Ross; Jordan, Jaffe (2019): *Corporate Finance, Twelfth Edition*, McGraw-Hill Education
- Cudby, Adrian (2019): *Commercial Lending, Principles and Practice*, Kogan Page Limited
- Dibb, S. (2006). *Marketing Concepts & Strategies (with CourseMate & EBook Access Card) by Ferrell, O.C., Dibb, Sally, Simkin, Lyndon, Pride, William M (2012) Paperback*. Cengage Learning EMEA.

## Civil Aviation

Module name <b>Civil Aviation</b>			
Degree course <b>Aviation Management (AVIMA)</b>		Degree <b>Master of Aviation Management</b>	
Module responsible(s) <b>Prof. Dr.-Ing. Andreas Hotes</b>			
As of <b>2023-08-02</b>		Language <b>English</b>	
Type <b>Compulsory</b>	Examination type <b>SMP</b>	CP according to ECTS <b>9</b>	
Study type <b>Part time career</b>	Semester <b>1</b>	Presence <b>62</b>	L / E / L / P / S <b>30 / 32 / 0 / 0 / 0</b>

Recommended prerequisites <b>None.</b>
Special regulations

Workload breakdown				
Presence <b>62,0 h</b>	Self-study <b>163,0 h</b>	Projects <b>0,0 h</b>	Exam <b>0,0 h</b>	Total <b>225 h</b>

Learning objectives
Knowledge
– The students understand the economic and political principles of civil aviation in the areas of flight safety and aviation security in both its historical and current context.
Skills
– The students are able to analyse specific problems in civil aviation and contribute to finding optimal solutions in all areas named in the content.
Social
– The students appreciate the necessity of resolving conflicts arising from different goals and interests in a cooperative manner.
Autonomy
– The students are able to develop their own positions and defend these positions with clear arguments.

## Civil Aviation

### Content

1. Principles of Civil Aviation: transport fundamentals, historical outline of its development, value-added chain and business models in aviation, aviation institutions and international cooperation, regulation and deregulation.
2. Safety and Security: Safety Management in aviation, the problems of Human Factors, Just Culture, terrorism and threats, danger prevention, legal and organisational frameworks.
3. Aviation and Society: aviation dealing with social and political pressures, public perception, environmental costs, consumer protection, corporate communication and public affairs management.

### Compulsory literature

- Reason, J. (2009). *Human error* (20. print.). Cambridge [u.a.] : Cambridge Univ. Press.
- Button, K. (2006). *Transport Economics*. Edward Elgar Publishing.

### Suggested literature

- Biermann, T. (2015). *Safety Management in Aviation - and Beyond*. Wildau : Wildau Verlag.
- Dekker, S. (2012). *Just culture : balancing safety and accountability* (2. ed.). Hampshire : Ashgate.
- (2013). *ICAO: Safety Management Manual (SMM)*.
- (2015). Air transport revolution: socio-economic impact and open questions. The Geographies of Air Transport, Andrew R. Goetz, Lucy Budd. Ashgate, UK (2014). £65, ISBN: 978-1409453314 (hardcover); ISBN: 978-1472405302 (ebook). Low Cost Carriers – Emergence, Expan. *Journal of Transport Geography* Elsevier.
- Schwenk, W, Giemulla, E & Schyndel, H. (2013). *Handbuch des Luftverkehrsrechts* (4. Aufl.). Köln ; München [u.a.] : Heymanns.
- Herkenhoff, P, Krautheim, S, Semrau, F & Steglich, F. (2021). *Corporate Social Responsibility along the Global Value Chain*. Munich: Center for Economic Studies and ifo Institute (CESifo).
- Müller, R. (2014). *Aviation risk and safety management : methods and applications in aviation organizations*. Cham [u.a.] : Springer.
- Niccoli, R. (2013). *History of Flight: From the Flying Machine of Leonardo da Vinci to the Conquest of the Space*. White Star.
- Wittmer, A, Bieger, T & Müller, R. (2021). *Aviation Systems : Management of the Integrated Aviation Value Chain* (Second edition). Cham : Springer.

## General Management Skills

Module name <b>General Management Skills</b>		
Degree course <b>Aviation Management (AVIMA)</b>	Degree <b>Master of Aviation Management</b>	
Module responsible(s) <b>Haack, Bertil</b>		
As of <b>2023-04-26</b>	Language <b>English</b>	
Type <b>Compulsory</b>	Examination type <b>SMP</b>	CP according to ECTS <b>10</b>

Study type <b>Part time career</b>	Semester <b>1</b>	Presence <b>84</b>	L / E / L / P / S <b>40 / 44 / 0 / 0 / 0</b>
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Recommended prerequisites <b>Fundamentals of business administration.</b>
Special regulations

Workload breakdown				
Presence <b>84,0 h</b>	Self-study <b>128,0 h</b>	Projects <b>30,0 h</b>	Exam <b>8,0 h</b>	Total <b>250 h</b>

## General Management Skills

### Learning objectives

#### Knowledge

- Students will be able to apply, deepen and develop their understanding of the essential principles of effective management of organizations and projects in an international context.

#### Skills

- Students are able to recognize, assess, systematically prepare, plan and execute the necessity of management decisions in working contexts in companies or projects.

#### Social

- The students are able to analyze and assess the working conditions in mixed teams of specialists and responsible managers and are able to design and implement them in a goal-oriented manner.

#### Autonomy

- The students understand their specific role in a management team and using their special knowledge contribute to a successful outcome.
- Students understand their specific role in a management team and use their specialized knowledge to independently contribute to the design of collaboration and successful outcome of the work tasks of that team.

### Content

1. Decision Making overview of methods of finding decisions systematically, information analysis, developing and evaluating alternatives.
2. Human Resource Management core elements of personnel management, personnel development, Human-Factors problems and solutions.
3. Project Management Project organisation, Project controlling, success factors and barriers in project teams.
4. Supply Chain Management concepts of value-added chain, bottleneck planning, problems at the interface.
5. International Management history of world trade, international division of labour and comparative competitive advantages, characteristic forms of internationalisation, planning and implementing internationalisation.

### Compulsory literature

- Verzuh, E. (2021). *The fast forward MBA in project management : the comprehensive, easy-to-read handbook for beginners and pros* (Sixth edition.). Hoboken, New Jersey :Wiley,.
- Gattorna, J. (1998). *Strategic Supply Chain Alignment*. Taylor & Francis Ltd.
- M. Rugman, A, Collinson, S & M. Hodgetts, R. (2012). *International Business*. Pearson Education.
- Michalko, M. (2006). *Thinkertoys A Handbook of Creative-Thinking Techniques*. Potter/TenSpeed/Harmony.

## General Management Skills

### Suggested literature

- Banfield, P & Kay, R. (2012). *Introduction to human resource management* (2. ed.). Oxford [u.a.] : Oxford Univ. Press.
- de Bono, E. (2016). *Six Thinking Hats*. Penguin Life.
- Kerzner, H & Saladis, F. (2013). *Project management workbook and PMP/CAPM exam study guide* (11. ed.). Hoboken, New Jersey : John Wiley & Sons, Inc.
- L. Lengnick-Hall, M & A. Lengnick-Hall, C. (2003). *Human Resource Management in the Knowledge Economy: New Challenges, New Roles, New Capabilities*. Berrett-Koehler Publishers.
- Losey, M, Meisinger, S & Ulrich, D. (2005). *The Future of Human Resource Management*. Wiley.
- N. Baron, J & M. Kreps, D. (2009). *Strategic Human Resources: Frameworks for General Managers*. Wiley India Pvt. Limited.
- Yukl, G. (2019). *Leadership in Organizations*. Pearson Education Limited.

## Leadership Skills

Module name <b>Leadership Skills</b>			
Degree course <b>Aviation Management (AVIMA)</b>		Degree <b>Master of Aviation Management</b>	
Module responsible(s) <b>Bond, Gregory</b>			
As of <b>2021-02-16</b>		Language <b>English</b>	
Type <b>Compulsory</b>	Examination type <b>SMP</b>	CP according to ECTS <b>8</b>	
Study type <b>Part time career</b>	Semester <b>1</b>	Presence <b>46</b>	L / E / L / P / S <b>20 / 26 / 0 / 0 / 0</b>

Recommended prerequisites <b>None</b>
Special regulations

Workload breakdown				
Presence <b>46,0 h</b>	Self-study <b>94,0 h</b>	Projects <b>50,0 h</b>	Exam <b>10,0 h</b>	Total <b>200 h</b>

Learning objectives
Knowledge
– Students understand various cultural approaches to communication and leadership and the theoretical basics of leadership and motivation.
Skills
– Students gain the ability to communicate appropriately in different settings, including difficult negotiations and in leadership roles.
Social
– Students experience situations of cooperation and conflict in the context of different cultures and learn to manage difference.
Autonomy
– Students are able to express their own interests and positions appropriately and to take on leadership responsibilities.



## Leadership Skills

### Content

1. Cross Cultural Communication theoretical fundamentals, models of intercultural communication, perceptions of self and the other, practical consequences.
2. Leadership and Motivation leadership styles, motivation theories, intrinsic/extrinsic motivation, situational leadership, change management. Personal approach to leadership.
3. Negotiation and Presentation effective presentations, public speaking and using media, negotiating strategies, interests, difficult conversations, intercultural aspects in presentations and negotiations.

### Compulsory literature

- Students write their paper based on a recommended reading list, which includes the titles below and many more selected titles.

### Suggested literature

- Alison, Emily; Alison, Laurence, Rapport. The Four Ways to Read People (London 2020)
- Edmundsen, Amy, The Fearless Organization: Creating Psychological Safety in the Workplace for Learning, Innovation and Growth (Hoboken, 2019)
- Fisher / Ury, Getting to Yes: How to Reach Agreement without Giving In (any edition)
- Meyer, Erin, The Culture Map: Breaking through Invisible Boundaries of Global Business (New York, 2014)
- Pink, Daniel, Drive; The Surprising Truth about What Motivates Us (New York, 2009)

## Advanced Research Methods

Module name <b>Advanced Research Methods</b>		
Degree course <b>Aviation Management (AVIMA)</b>	Degree <b>Master of Aviation Management</b>	
Module responsible(s) <b>Prof. Dr. rer. nat. Rainer Stollhoff</b>		
As of <b>2022-07-11</b>	Language <b>English</b>	
Type <b>Elective</b>	Examination type <b>SMP</b>	CP according to ECTS <b>5</b>

Study type <b>Part time career</b>	Semester <b>1</b>	Presence <b>56</b>	L / E / L / P / S <b>20 / 22 / 0 / 14 / 0</b>
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Recommended prerequisites <b>Experience of writing academic texts, basic mathematical skill (algebra, calculus), database systems, handling with Microsoft Excel</b>
Special regulations <b>ST (Statistics and Forecasting Methods) AT (Analytical Techniques) AW (Academic Writing)</b>

Workload breakdown				
Presence <b>56,0 h</b>	Self-study <b>50,0 h</b>	Projects <b>15,0 h</b>	Exam <b>4,0 h</b>	Total <b>125 h</b>

## Advanced Research Methods

### Learning objectives

#### Knowledge

- ST: The students know the basics of descriptive statistics
- ST: The students know the basics of probability theory
- AW: Knowledge • The students will gain knowledge of key aspects of academic writing such as: Writing introductions, being critical, describing methods, referring to literature, reporting and discussing results, writing conclusions, transition statements, hedging
- AT: The students know about the core areas of business intelligence such as: data management, data visualization and data analysis
- AT: The students know specific aspects of analytical techniques as part of business intelligence

#### Skills

- ST: The students are able to plan, to execute and to evaluate an empirical data analysis
- AW: The students will become familiar with a range of corpus tools which should serve to improve their lexical choices, phraseology and overall academic style
- AT: The students are able to define common data models as a precondition of execute analyzes

#### Social

- ST: The students learn to work in teams and to support each other in case of problems
- AW: In groups the students present results of research in class
- AT: The students learn to discuss in groups and to advance their view

#### Autonomy

- AW: The students are empowered to carry out their own research on a range to tools. The students should be able to consult these tools to perfect their own writing style in subsequent writing assignments.

## Advanced Research Methods

### Content

1. Empirical Statistics and Forecasting Methods
  - 1.1 Experiments, variables, populations, samples, distributions,...
  - 1.2 Univariate Statistics: Central tendency, dispersion
  - 1.3 Bivariate Statistics: Scatterplots, Covariance & Correlation
  - 1.4 Forecasting Methods: Linear Regression, Time Series Analysis,...
2. Analytical Techniques
  - 2.1 Introduction Business Intelligence • Objectives, Definition and Tasks
  - 2.2 Information Overload • as a main reason for require analytical techniques
  - 2.3 Information Systems • for visualization of data (with exercises)
  - 2.4 Database Systems • for management of data (with exercises)
  - 2.5 Business Intelligence • as a Framework (with exercises)
  - 2.6 Data Mining • for using analytical techniques (with exercises)
3. Academic Writing
  - 3.1 Knowledge • The students will gain knowledge of key aspects of academic writing such as: Writing introductions, being critical, describing methods, referring to literature, reporting and discussing results, writing conclusions, transition statements, hedging
  - 3.2 Skills • The students will become familiar with a range of corpus tools which should serve to improve their lexical choices, phraseology and overall academic style
  - 3.3 Social competence • In groups the students present results of research in class.
  - 3.4 Autonomy • The students are empowered to carry out their own research on a range to tools. The students should be able to consult these tools to perfect their own writing style in subsequent writing assignments.

### Compulsory literature

- Gibilisco, S. (2011). *Statistics DeMYSTiFieD, 2nd Edition*. McGraw Hill Professional.
- (2013). *SQL Server 2012; [4]: Data Mining, Analyse und multivariate Verfahren*. Berlin : Comelio Medien.

### Suggested literature

## European Law and Policy

Module name <b>European Law and Policy</b>		
Degree course <b>Aviation Management (AVIMA)</b>	Degree <b>Master of Aviation Management</b>	
Module responsible(s) <b>Hederer, Christian</b>		
As of <b>2021-02-03</b>	Language <b>English</b>	
Type <b>Elective</b>	Examination type <b>SMP</b>	CP according to ECTS <b>5</b>

Study type <b>Part time career</b>	Semester <b>1</b>	Presence <b>58</b>	L / E / L / P / S <b>25 / 33 / 0 / 0 / 0</b>
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Recommended prerequisites <b>General business administration knowledge</b>
Special regulations

Workload breakdown				
Presence <b>58,0 h</b>	Self-study <b>50,0 h</b>	Projects <b>10,0 h</b>	Exam <b>9,0 h</b>	Total <b>127 h</b>

Learning objectives
Knowledge
– Students will comprehend economics, workings and restrictions of a market economy, challenges of economic policy, consequences of political decisions, fundamental rules of law in an European context
Skills
– They acquire the competence to analyse current political issues, draw conclusions for a business firm, contribute to relevant discussions, anticipate and solve problems in a conflict situation
Social
– During the case study work in small groups students can train their personal behaviour in discussions and decision making techniques, they also learn to acquire a personal profile to get access to the European (German) job market
Autonomy

## European Law and Policy

### Content

1. Political economy: Economics as an academic discipline, micro/ macro economics, market mechanisms and restrictions, economic policy, income distribution and taxes
2. Economic Policy in the European Union: Aims, ideas, instruments, the economic community, Eurozone institutions and policy, European Monetary Union, trade institutions and policy, labour policy and conflicts, current challenges
3. European Law: Basic legal concepts, rule of law, European and national law
4. Job Application: Strategies for job-searching, CV and cover letter, preparing for a job interview, legal issues of working in Germany.

### Compulsory literature

- Wyplosz, C & Baldwin, R. (2019). *The Economics of European Integration*. McGraw-Hill Education.
- Samuelson, P, Sen, A & Nordhaus, W. (2019). *Economics*. Mc Graw Hill.

### Suggested literature

- Sachs, J. (2009). *Common Wealth: Economics for a Crowded Planet*. Penguin.
- Marsh, D. (2013). *Europe's Deadlock: How the Euro Crisis Could Be Solved – And Why It Still Won't Happen*. Yale University Press.
- De Grauwe, P. (2018). *Economics of Monetary Union*. Oxford University Press .
- Steger, M. (2020). *Globalization: A Very Short Introduction*. Oxford University Press.
- Wells, R & Krugmann, P. (2018). *Economics*. Worth.
- Talani, L. (2014). *European Political Economy: Issues and Theories*. Tailor & Francis.

## Aviation Management

Module name <b>Aviation Management</b>			
Degree course <b>Aviation Management (AVIMA)</b>		Degree <b>Master of Aviation Management</b>	
Module responsible(s) <b>Prof. Dr. rer. pol. Thomas Biermann</b>			
As of <b>2021-05-06</b>		Language <b>English</b>	
Type <b>Compulsory</b>	Examination type <b>SMP</b>	CP according to ECTS <b>10</b>	
Study type <b>Part time career</b>	Semester <b>2</b>	Presence <b>80</b>	L / E / L / P / S <b>40 / 40 / 0 / 0 / 0</b>

Recommended prerequisites <b>Fundamentals of business administration, technical fundamentals of flying, aviation law.</b>
Special regulations

Workload breakdown				
Presence <b>80,0 h</b>	Self-study <b>170,0 h</b>	Projects <b>0,0 h</b>	Exam <b>0,0 h</b>	Total <b>250 h</b>

Learning objectives
Knowledge
– Students gain an understanding of the business models of service providers in the value-added chain of the aviation industry.
Skills
– The students learn to solve operational and business problems, especially in the interface of various operators in the value-added chain with the special focus of the civil aviation industry.
Social
– The students analyse problems and develop solutions in internationally mixed small groups in a cross cultural context.
Autonomy
– The students are encouraged to develop and defend their own ideas.

## Aviation Management

### Content

1. Airline Management business models of aviation operating companies (passage, freight, traditional airlines, low cost, general aviation, business aviation), financing airplanes, route-planning, calculating route returns, revenue management.
2. Airport Management location selection, capacity planning, ownership structure and financing, terminal concepts, aviation and non-aviation returns, operational aspects, interface to ground transport, security issues.
3. Air Traffic Control Management concept of Air Navigation Service Provider, division of aerospace, flight planning and coordination, technical equipment, personnel und training, ATC/ATM in Europe, Single European Sky-Initiative.

### Compulsory literature

- de Neufville, R, Odoni, A, Belobaba, P & Reynolds, T. (2013). *Airport Systems: Planning, Design, and Management (Aviation Week Book)* by De Neufville, Richard L., Odoni, Amedeo R. published by McGraw-Hill Professional (2002). McGraw-hill.
- Shaw, S. (2011). *Airline Marketing and Management*. Routledge.
- Biermann, T. (2015). *Safety management in aviation - and beyond*. Wildau : Wildau Verl.

### Suggested literature

- Morell, P. (2020). *Moving Boxes by Air: The Economics of International Air Cargo*. Routledge.
- Billig, B & Cook N., G. (2017). *Airline Operations and Management: A management textbook*. Routledge.
- Ison, S & Budd, L. (2016). *Air Transportation Management*. Routledge.
- Stolzer, A, Halford, C & Goglia, J. (2012). *Safety management systems in aviation* (Reprinted). Farnham, Surrey : Ashgate.
- Doganis, R. (2005). *The Airline Business*. Routledge.
- G. Wensveen, J. (2015). *Air Transportation*. Routledge.
- Holloway, S. (2012). *Straight and Level: Practical Airline Economics*. Ashgate Publishing Limited.
- K. Taneja, N. (2017). *21rst Century Airlines*. Taylor and Francis.
- Kirwan, B, Rodgers, M & Schäfer, D. (2017). *Human Factors Impacts in Air Traffic Management*. Routledge.
- Morell, P. (2013). *Airline Finance*. Routledge.



## Case Study

Module name <b>Case Study</b>		
Degree course <b>Aviation Management (AVIMA)</b>	Degree <b>Master of Aviation Management</b>	
Module responsible(s) <b>Haack, Bertil</b>		
As of <b>2023-04-26</b>	Language <b>English</b>	
Type <b>Elective</b>	Examination type <b>SMP</b>	CP according to ECTS <b>5</b>

Study type <b>Part time career</b>	Semester <b>2</b>	Presence <b>32</b>	L / E / L / P / S <b>2 / 0 / 0 / 30 / 0</b>
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Recommended prerequisites
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Special regulations
<p>The content of the module can change each year because it depends on the choice of the topic of the responsible lecturer. Case studies have to be actual and they have to fit to the theoretical context. The module contains specific components as for example excursions (depending on the topic) which have to be prepared by the students or contrivutions to a conference etc.</p>

Workload breakdown				
Presence <b>32,0 h</b>	Self-study <b>45,0 h</b>	Projects <b>163,0 h</b>	Exam <b>10,0 h</b>	Total <b>250 h</b>

## Case Study

### Learning objectives

#### Knowledge

- The students independently acquire specific knowledge on a particular current scientific topic with practical relevance.

#### Skills

- The students will be able to understand and analyze a given case study.
- The students will be able to identify, evaluate, select and apply appropriate problem-solving strategies for the case study.
- The students are able to independently solve a given case study using the selected means and to check and, if necessary, improve their result with regard to the fulfillment of the requirements formulated in the case study.

#### Social

- The students deepen their skills in working in groups and respecting different ways of learning and working.

#### Autonomy

- The students deepen their skills to organise their work by themselves.

### Content

1. The lecturer informs about the given case study in the beginning of the semester.
2. During the lectures the theoretical input (background of the case study) is given.
3. Excursions or other elements of this modules have to be planned by the students (supported by the lecturer)

### Compulsory literature

- Ridder, H. (2020). *Case study research : approaches, methods, contribution to theory* (Second edition). Augsburg ; München : Rainer Hampp Verlag.
- Yin, R. (2018). *Case study research and applications : design and methods* (Sixth Edition). Los Angeles ; London ; New Delhi ; Singapore ; Washington DC ; Melbourne : SAGE.
- Specific literature (depending on the topic) given by the lecturer

### Suggested literature

## Master Thesis Workshop

Module name <b>Master Thesis Workshop</b>		
Degree course <b>Aviation Management (AVIMA)</b>	Degree <b>Master of Aviation Management</b>	
Module responsible(s) <b>M.A. John Paul O Donoghue</b>		
As of <b>2023-04-26</b>	Language <b>English</b>	
Type <b>Compulsory</b>	Examination type <b>SMP</b>	CP according to ECTS <b>3</b>

Study type <b>Part time career</b>	Semester <b>3</b>	Presence <b>12</b>	L / E / L / P / S <b>12 / 0 / 0 / 0 / 0</b>
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Recommended prerequisites <b>Basic knowledge of scientific working methods, basis of bachelor thesis</b>
Special regulations

Workload breakdown				
Presence <b>12,0 h</b>	Self-study <b>63,0 h</b>	Projects <b>0,0 h</b>	Exam <b>0,0 h</b>	Total <b>75 h</b>

## Master Thesis Workshop

### Learning objectives

#### Knowledge

- Students know principles and the scientific working methods and are able to prepare a qualified master thesis.

#### Skills

- Students should have applicable knowledge and a high level of competence for problem analysis, solution development and the presentation of scientific results. They are able to justify their scientific results and defend them in discourse.

#### Social

- Students can independently study the material learned in exercises and solve further problems together in working groups. They can present and justify the solutions appropriately.

#### Autonomy

- Students can set and check their learning goals themselves. The learning process can be planned and monitored independently. For this purpose, students can independently consult the relevant specialist literature and other media.

### Content

1. Basis of the scientific working methods
2. Methods of problem development by means of technical and technological analytics
3. Evaluation criteria of scientific work
4. Practice of presentation techniques

### Compulsory literature

### Suggested literature

## Work Practice Internship

Module name <b>Work Practice Internship</b>		
Degree course <b>Aviation Management (AVIMA)</b>	Degree <b>Master of Aviation Management</b>	
Module responsible(s)		
As of <b>2023-04-26</b>	Language <b>English</b>	
Type <b>Elective</b>	Examination type <b>SMP</b>	CP according to ECTS <b>5</b>

Study type <b>Part time career</b>	Semester <b>3</b>	Presence <b>16</b>	L / E / L / P / S <b>16 / 0 / 0 / 0 / 0</b>
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Recommended prerequisites <b>Training workshop Job Application (1st semester)</b>
Special regulations

Workload breakdown				
Presence <b>16,0 h</b>	Self-study <b>0,0 h</b>	Projects <b>234,0 h</b>	Exam <b>0,0 h</b>	Total <b>250 h</b>

## Work Practice Internship

### Learning objectives

#### Knowledge

- The students know about the legal requirements and regulations for entering the German labour market after graduation.
- The students can describe the steps and tools commonly used in recruitment in German companies.
- The students get practical work experiences.
- The students learn how to apply theoretical knowledge in an practical environment.

#### Skills

- The students can effectively express their professional experience and strengths in oral and written communication

#### Social

- The students can reflect on and self-assess their potential as job applicants in Germany and other EU-countries, in particular in the aviation sector.
- The students can anticipate the expectations of employers and recruiters.
- The students learn to integrate in a working team.
- The students take part in discussions and decision making processes.

#### Autonomy

- The students can search for open positions, assess their potential as applicant, draft fitting application documents and prepare for a job interview.
- The students have to organise themselves in a professional environment.

### Content

1. Legal framework for labour market access for international students working during their studies and for international graduates of a German higher education institutuion.
2. Steps in a recruitment process
3. Effective self presentation
4. Drafting a cover letter and curriculum vitae
5. Behaviour in settings frequently used in assessment centers
6. The students have to choose a company by themselves but they get support by the university.
7. The duration of the internship is at least 10 weeks (full-time).
- 8.

### Compulsory literature

### Suggested literature