Appendix 2 to the Study Regulations for the

Master's Programme

Landscape Studies and Greenspace Management

Module Descriptions

Overview of Modules

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1st	-	Elective Module 1		See catalogue	6	8
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-	GGI.19.045	Management in Business and Authorities		Brämer	6	31
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1) Students with a German language level of less than B2 (CEFR) or equivalent take the compulsory module "German for International Students". All other students (with a German language level more advanced than B2 (CEFR) or equivalent) take the module "Foreign Language I".

Catalogue of Compulsory Modules

LGM.20.001	Dendrology and Planting Design
Version	13 May 2020
Module title (German)	Gehölzkunde und Bepflanzungsplanung
Responsible	Prof. Dr Caroline Rolka
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Compulsory module in the 1st semester (4-semester Master's, Path B)
Frequency and length	Starts every summer semester, one semester in length
Prerequisites	None

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.
Assessments	AP Alternative assessment, portfolio
Assessment prerequisites	Participation in the seminar and workshop (compulsory attendance)

Courses and hours

I	LGM.20.001.1	Identification of Trees and Shrubs, Planning for Woody Plants Seminar, 2 hours per week	32 h
II	LGM.20.001.2	Practical Application of the Knowledge Acquired during the Semester Workshop, 2 hours per week	32 h
III		Independent preparation and revision, including assessment	116 h
		Total:	180 h

Lecturer	Prof. Dr Caroline Rolka, TBA
Language of instruction	English
Content	Students independently develop an advanced, specialised knowledge of European trees and shrubs and apply this knowledge in an in-depth investigation of one tree species with reference to its species-specific characteristics, growing conditions, interactions with other plants, possible diseases, uses in landscape architecture, care requirements and cultural backgrounds. The acquired knowledge will also be applied through the design of an identification or planting plan for trees and shrubs. This plan shall include in particular practical aspects, requirements with respect to plant typology, such as site conditions, colour aspects, planting distance, plant compatibility and sustainability strategies, as well as design aspects.
Learning objectives/outcomes	After completing the module, students will be able to independently identify European trees and shrubs in a professional manner and, as a result, will have the skills required for using trees and shrubs in the context of planning in the field of landscape architecture. With the knowledge they have gained, students are able to deduce the respective plant-care measures and take these into consideration

	as a planning aspect in the planting plan. Accordingly, students will apply their acquired knowledge on requirements related to plant typology and on aesthetic design requirements to a practical application.
Teaching and learning methods	Seminars and practical workshops
Literature	Guidelines from the Landscape Development and Landscaping Research Society (FLL) Phillips & Rix: Shrubs, 1994 Wöhrle, Regine Ellen and Wöhrle Hans-Jörg: Basics: Designing with Plants, 2017. Robinson, Nick: The Planting Design Handbook, 2016. Oudolf Piet: A Journey Through a Plantsman's Life, 2015. Rohde, Michael: Pflege historischer Gärten, Theorie und Praxis, 2008. Current nursery catalogues Magazine Gartenpraxis: https://www.gartenpraxis.de/ https://www.baumkunde.de/baumbestimmung/ https://www.arborday.org/trees/treeguide/classification.cfm http://opac.lbs-rostock.gbv.de/DB=2/XMLPRS=N/PPN?PPN=09001071X http://opac.lbs-rostock.gbv.de/DB=2/XMLPRS=N/PPN?PPN=351171649 http://opac.lbs-rostock.gbv.de/DB=2/SET=7/TTL=11/SHW?FRST=15

LGM.20.002 Landscaping and Materials

Version	13 May 2020
Module title (German)	Bauweisen und Materialien im Landschaftsbau
Responsible	TBA
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Compulsory module in the 1st semester (4-semester Master's, Path B)
Frequency and length	Starts every summer semester, one semester in length
Prerequisites	None

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.
Assessments	SCH Proctored written examination (Klausur), 120 minutes in length
Assessment prerequisites	Participation in the workshops (compulsory attendance 80%)

Courses and hours

I	LGM.20.002.1	Landscaping Methods Lecture, 1 hour per week	16 h
II	LGM.20.002.2	Landscaping Methods Workshop, 1 hour per week	16 h
III	LGM.20.002.3	Use of Materials in Landscaping Lecture, 1 hour per week	16 h
IV	LGM.20.002.4	Use of Materials in Landscaping Workshop, 1 hour per week	16 h
V		Independent preparation and revision, including preparation for assessment	116 h
		Total:	180 h

Lecturer	TBA
Language of instruction	English
Content	Earthwork, planting, seeding and ground work, square und path construction, stair construction and water installations Use of wood, stone, concrete, metal, plastics, sustainable construction
Learning objectives/outcomes	Students gain an in-depth knowledge of the essential landscaping materials and methods and are able to apply this knowledge in their own planning projects.
Teaching and learning methods	-
Literature	Harris, Charles W., Dines, Nicholas T.; Brown, Kyle D.: *Time-saver standards for landscape architecture: design and construction data*, New Delhi, 2011, McGraw Hill Education (India) Private Limited. Fraser, Gordon Rowland : *Landscape Professional Practice*, Farnham, Surrey, Ashgate, 2014. Fine, Jonathan: *English for Landscaping Professionals*, Berlin [u.a.], 2014, Patzer. And many others.

LGM.20.003 German for International Students

Version	13 May 2020
Module title (German)	Deutsch für Studierende aus dem Ausland
Responsible	Language Centre
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Compulsory module in the 1st Semester (4-semester Master's, Path B)
Frequency and length	Starts every summer semester, one semester in length
Prerequisites	Compulsory module for students with a German language level of less than B2 (CEFR) or equivalent

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.
Assessments	AHA Written assignment 15 pages in length or AP Presentation 20 minutes in length or AR Presentation 10 minutes in length with paper 10 pages in length The assessor announces the type of assessment at the beginning of the semester.
Assessment prerequisites	None

Courses and hours

I	LGM.20.003.1	German as a Foreign Language Tuition in seminars, 4 hours per week	64 h
II		Independent preparation and revision, including preparation for assessment	116 h
		Total:	180 h

Lecturer	Language Centre
Language of instruction	English / German
Content	German. Development of language proficiency to a level of B1: learning to communicate From B1: Improvement of language proficiency and placing emphasis on the quality of expression
Learning objectives/outcomes	Students gain an intermediate knowledge of the foreign language, deepen and expand their language and cultural skills, and develop language proficiency in their field. After reaching the level B1: Students acquire the ability to communicate with others at the international level.
Teaching and learning methods	In the past, learning aids have been organised in many cases by the students themselves: use of audio and visual documents (projector), listening texts through high-quality technical equipment. The learning platform Moodle is used extensively in all languages.
Literature	Textbooks depending on level, topics from trade journals, audio documents from the internet, BBC Mundo.
Further information	Additional literature available in German and English.

LGM.20.004 Foreign Language

Version	13 May 2020
Module title (German)	Fremdsprache
Responsible	Language Centre
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Elective module in the 1st semester (4-semester Master's, Path B)
Frequency and length	Starts every summer semester, one semester in length
Prerequisites	Compulsory module for students with a German language level more advanced than B2 (CEFR) or equivalent

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.
Assessments	AHA Written assignment 15 pages in length or AP Presentation 20 minutes in length or AR Presentation 10 minutes in length with paper 10 pages in length The assessor announces the type of assessment at the beginning of the semester.
Assessment prerequisites	None

Courses and hours

I	LGM.20.004.1	Foreign Language I Seminar, 4 hours per week	64 h
II		Literature Studies	32 h
III		Independent preparation and revision, including preparation for assessment	84 h
		Total:	180 h

Lecturer	Language Centre
Language of instruction	Foreign language
Content	A foreign language can be chosen freely from the courses offered by the Language Centre of the Neubrandenburg University of Applied Sciences.
Learning objectives/outcomes	Over the course of the module, students learn to speak a foreign language fluently, correctly and confidently.
Teaching and learning methods	For specific subject areas and fields Projection of visual documents using a projector, listening texts through high-quality technical equipment. The learning platform Moodle is used extensively in all languages.
Literature	-
Further information	The courses for the module Foreign Language I or II can be chosen from the ongoing language classes offered by the University.

- Elective Module 1

Version	13 May 2020
Module title (German)	Wahlpflichtmodul 1
Responsible	See description of module
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Compulsory module in the 1st semester (4-semester Master's, Path B)
Frequency and length	Starts every summer semester, one semester in length
Prerequisites	None

Requirements for the award of credits

Marking and weighting	See description of module
Assessments	See description of module
Assessment prerequisites	See description of module

Courses and hours

See description of module

Total: 180 h

Lecturer	See description of module
Language of instruction	English
Content	See description of module
Learning objectives/out-comes	See description of module
Teaching and learning methods	See description of module
Literature	See description of module
Further information	See description of module

- Elective Module 2

Version	13 May 2020
Module title (German)	Wahlpflichtmodul 2
Responsible	See description of module
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Compulsory module in the 1st semester (4-semester Master's, Path B)
Frequency and length	Starts every summer semester, one semester in length
Prerequisites	None

Requirements for the award of credits

Marking and weighting	See description of module
Assessments	See description of module
Assessment prerequisites	See description of module

Courses and hours

See description of module

Total: 180 h

Lecturer	See description of module
Language of instruction	English
Content	See description of module
Learning objectives/out-comes	See description of module
Teaching and learning methods	See description of module
Literature	See description of module
Further information	See description of module

LGM.20.010 Design Studio 1

Version	13 May 2020
Module title (German)	Projekt 1
Responsible	All lecturers in the degree programme
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Compulsory module in the 1st semester (2-semester Master's, Path A) Compulsory module in the 2nd semester (4-semester Master's, Path B)
Frequency and length	Starts every winter semester, one semester in length
Prerequisites	None

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.
Assessments	AHA Project work, max. 20 pages in length
Assessment prerequisites	None

Courses and hours

I	LGM.20.010.1	Design Studio 1 Seminar, 1 hour per week	16 h
II	LGM.20.010.2	Design Studio 1 Workshop, 3 hour per week	48 h
III		Independent preparation and revision, including assessment task	116 h
		Total:	180 h

Lecturer	All lecturers in the degree programme
Language of instruction	English
Content	Application of scientific methods to work on a concrete, complex planning project from the field of landscape architecture in Germany or another country through the development of a research question. Development of solutions through extensive independent literature research, as well as the selection and use of suitable software for working on the planning tasks in the group or, if applicable, individually.
Learning objectives/outcomes	After completing the module, students will be able to: - apply the principles of comprehensive project management to projects in interdisciplinary groups, - incorporate current scientific findings and methods, as well as advanced knowledge about planning sciences, into their own design work, - apply advanced knowledge about aims and contents of instruments of landscape architecture, like for example creative expression, - specialise in selected topic areas of landscape architecture through independent scientific work, - explore selected new subject areas through the evaluation of information, taking into account ecological and social perspectives, - lead an academic discourse in the group on specialised and related planning areas.
Teaching and learning methods	Individual and group work, project-based learning
Literature	To be decided, depending on the topic

LGM.20.005 Greenspace Management

Version	13 May 2020
Module title (German)	Grünflächenmanagement
Responsible	Prof. Dr Elke Mertens
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Compulsory module in the 1st semester (2-semester Master's, Path A) Compulsory module in the 2nd semester (4-semester Master's, Path B)
Frequency and length	Starts every winter semester, one semester in length
Prerequisites	Knowledge of plants (e.g. from participation in the elective module Maintenance of Green and Open Spaces) recommended.

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.
Assessments	AP Alternative assessment, portfolio
Assessment prerequisites	None

Courses and hours

I	LGM.20.005.1	Tree Cadastres Seminar, 2 hours per week	32 h
II	LGM.20.005.2	Care Plans and Management for Sustainable Green and Open Spaces, Green-Space Information System (GRIS), Calculation, Workshop, 2 hours per week	32 h
III		Independent preparation and revision, including preparation for assessment	116 h
		Total:	180 h

Lecturer	Prof. Dr Elke Mertens
Language of instruction	English
Content	Students gain an advanced knowledge in the area of long-term greenspace management. Aspects like care measures and intensities for the maintenance of sustainable and high-quality greenspaces and the economic viability (cost accounting and value determination) and use of greenspaces are analysed on the basis of current issues and applied to the student's own designs.
Learning objectives/outcomes	Students independently create care plans for the long-term conservation of trees and develop, calculate and present green and open spaces.
Teaching and learning methods	Seminar
Literature	European Arboricultural Council: *European Tree Worker: Handbook*. Berlin; Hannover, 2016, Patzer Verlag Roloff, Andreas: *Urban Tree Management: For the Sustainable Development of Green Cities, Oxford, Chichester, Hoboken, NJ*, 2016, John Wiley & Sons, Blackwell Pruetz, R.: *Lasting Value: Open Space Planning and Preservation Successes*, 2012 Senatsverwaltung Berlin: *Handbuch Gute Pflege*, 2018

LGM.20.007 Landscape and Structures

Version	13 May 2020
Module title (German)	Landschaft und Bauwerke
Responsible	Prof. Dr Philip Caston
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Compulsory module in the 1st semester (2-semester Master's, Path A) Compulsory module in the 2nd semester (4-semester Master's, Path B)
Frequency and length	Starts every winter semester, one semester in length
Prerequisites	None

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.
Assessments	AHA Written assignment 20 pages in length
Assessment prerequisites	Participation in seminars (compulsory attendance), poster presentation

Courses and hours

I	LGM.20.007.1	Landscape and structures, including academic work and visualisation Seminar, 4 hours per week	64 h
II		Independent preparation and revision, including assessment	116 h
		Total:	180 h

Lecturer	Prof. Dr Philip Caston
Language of instruction	English
Content	On the basis of current research on representative structures, infrastructure and functional structures, and their relationship to the landscape. Special features, boundaries, terminologies and doctrines are developed for a specific application through independent ideas and prepared on the basis of specialised scientific methods.
Learning objectives/outcomes	Using inductive reasoning for solving problems specific to the field, with the help of scientific methods, taking into account a broad, interdisciplinary context. The correct and subject-related scientific approach to research and the writing of subject-related essays at international level.
Teaching and learning methods	Seminar
Literature	York, T.: *English Canals Explained*, Countryside 2003. Houdin, J.-P.: *The Secret of the Great Pyramid*, Harper Collins 2009. Ashford, N. J. et al.: *Airport Engineering*, John Wiley, 2011. Times Atlases (ed.): *History of the World in Maps*, Times Books, 2014. Weselby, J. M.: *Citations Made Simple: A Student's Guide to Easy Referencing – The Complete Guide*, 2014. Wong, K.: *Avoiding Plagiarism*, Ontario 2010.

- Elective Module 3

Version	13 May 2020
Module title (German)	Wahlpflichtmodul 3
Responsible	See description of module
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Compulsory module in the 1st semester (2-semester Master's, Path A) Compulsory module in the 2nd semester (4-semester Master's, Path B)
Frequency and length	Starts every winter semester, one semester in length
Prerequisites	None

Requirements for the award of credits

Marking and weighting	See description of module
Assessments	See description of module
Assessment prerequisites	See description of module

Courses and hours

See description of module

Total: 180 h

Lecturer	See description of module
Language of instruction	English
Content	See description of module
Learning objectives/out-comes	See description of module
Teaching and learning methods	See description of module
Literature	See description of module
Further information	See description of module

-	**Elective Module 4**
Version	13 May 2020
Module title (German)	Wahlpflichtmodul 4
Responsible	See description of module
Credits	6

Degree programmes	LGM	Landscape Studies and Greenspace Management	Version 2020
		Compulsory module in the 1st semester (2-semester Master's, Path A)	
		Compulsory module in the 2nd semester (4-semester Master's, Path B)	
Frequency and length	Starts every winter semester, one semester in length		
Prerequisites	None		

Requirements for the award of credits

Marking and weighting	See description of module
Assessments	See description of module
Assessment prerequisites	See description of module

Courses and hours

See description of module

Total: 180 h

Lecturer	See description of module
Language of instruction	English
Content	See description of module
Learning objectives/out-comes	See description of module
Teaching and learning methods	See description of module
Literature	See description of module
Further information	See description of module

LGM.20.008 Internship (incl. Preparation and Follow-Up)

Version	13 May 2020
Module title (German)	Praktikumssemester (inkl. Vor.- und Nachbereitung).
Responsible	Prof. Dipl.-Ing. Johann Fröhlich
Credits	30
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Compulsory module in the 3rd semester (4-semester Master's, Path B)
Frequency and length	Starts every summer semester, one semester in length
Prerequisites	None

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.
Assessments	I Recognition of the internship in accordance with the Internship Regulations by the Internship Coordination Office; **and** Prerequisites: - Certification of an internship (20 weeks) at a recognised internship site - Internship certificate - Proof of participation in the seminars; compulsory attendance II AHA Internship report, 20 pages in length (weighting 80%); **and** III AP Presentation, 20 minutes in length (weighting 20%)
Assessment prerequisites	Approval of the internship site by the faculty member responsible for the internship

Courses and hours

I	LGM.20.008.1	Internship Semester Practical work, min. 20-week internship	868 h
II	LGM.20.008.2	Internship Semester (Preparation and follow-up work, supervision) Tuition in seminars, 2 hours per week	32 h
		Total:	900 h

Lecturer	Prof. Dipl.-Ing. Johann Fröhlich
Language of instruction	English
Content	Team-oriented investigation of subjects and issues specific to the field. Use of scientific, planning and artistic methods and approaches in freely chosen areas of work in professional practice in Germany and abroad. Analysis of workflows and areas of conflict in professional practice. Cooperative work with partners in the team or in communication processes. Investigation of specialist subjects and issues in planning, construction management, tendering, awarding contracts and invoicing. Workflows in professional practice. Transfer and reflection of the experience in the context of the degree programme.
Learning objectives/outcomes	Improvement of existing knowledge in cooperation with partners from professional practice. Application of planning-theory know-how. Teamwork / ability to work in a team. Interdisciplinary work. Insights into and practical experience with the work of the planning offices of independent garden and landscape architects, of urban greenspace planning offices or similar institutions, of gardening and landscaping companies or similar gardening companies.
Teaching and learning methods	Practical work on a daily basis at an internship site with preparation and follow-up seminar. Mentoring by the internship partner. Language of instruction is German or the respective national language for internships abroad. Continual preparation

	and follow-up of internship and internship report. Mentoring by the responsible faculty member.
Literature	Relevant literature corresponding to the respective topics. Planning documents and publications of the partner sites.

LGM.20.009 Master's Thesis incl. Defence Colloquium

Version	13 May 2020
Module title (German)	Master-Arbeit inklusive Kolloquium
Responsible	all
Credits	30
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Compulsory module in the 2nd semester (2-semester Master's, Path A) Compulsory module in the 4th semester (4-semester Master's, Path B)
Frequency and length	Starts every summer and winter semester, one semester in length
Prerequisites	Proof of at least 84 credits, including the module "Internship Semester" (Path B) or of at least 24 Credits (Path A)

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.
Assessments	MA Master's thesis, weighting: 77% (23 credits) and AKQ Colloquium (max. 60 minutes), weighting: 23% (7 credits)
Assessment prerequisites	A Master's thesis with a minimum mark of "sufficient" is required for the final colloquium.

Courses and hours

I	Master's Thesis	690 h
II	Final Colloquium	210 h
	Total:	900 h

Lecturer	Lecturers from the department LG
Language of instruction	English
Content	Independent investigation of a scientific issue in the area of landscape architecture and/or greenspace management under the guidance of a lecturer.
Learning objectives/outcomes	With the final thesis, students demonstrate their ability to independently investigate a specialised problem within a specified period of time using scientific methods and criteria. Furthermore, students are able to clearly present specialised information, both in writing and orally, in a manner that is appropriate for the respective target group.
Teaching and learning methods	-
Literature	Depending on the topic.
Further information	More detailed information can be found in the Framework Examination Regulations (RPO) and the Examination Regulations for the Master's programme Landscape Studies and Greenspace Management

Catalogue of Elective Modules

LGM.20.011 Design Studio 2

Version	13 May 2020
Module title (German)	Projekt 2
Responsible	All lecturers in the degree programme
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Elective module in the 1st semester (2-semester Master's, Path A)
Frequency and length	Starts every winter semester, one semester in length
Prerequisites	None

Requirements for the award of credits

Marking and weighting	No mark is awarded for the module.
Assessments	AP Alternative assessment, project
Assessment prerequisites	None

Courses and hours

I	LGM.20.011.1	Development of a scientific research question Seminar, 1 hour per week	16 h
II	LGM.20.011.2	Development of solution approaches and scientific methods for the issue Workshop, 3 hour per week	48 h
III		Independent preparation and revision, including assessment task	116 h
		Total:	180 h

Lecturer	All lecturers in the degree programme
Language of instruction	English
Content	Application of scientific methods to work on a concrete, complex planning project from the field of landscape architecture in Germany or another country through the development of a research question. Development of solutions through extensive independent literature research, as well as the selection and use of suitable software for working on the planning tasks in the group or, if applicable, individually.
Learning objectives/outcomes	After completing the module, students will be able to: - apply the principles of comprehensive project management to work in interdisciplinary groups, - incorporate current scientific findings and methods, as well as advanced knowledge about planning sciences, into their own design work, - apply advanced knowledge about aims and contents of instruments of landscape architecture, like for example creative expression, - specialise in selected topic areas of landscape architecture through independent scientific work, - explore selected new subject areas through the evaluation of information, taking into account ecological and social perspectives,

	- lead an academic discourse in the group on specialised and related planning areas.
Teaching and learning methods	Individual and group work, project-based learning
Literature	To be decided, depending on the topic

LGM.20.012 Designing in the Historical Environment

Version	13 May 2020
Module title (German)	Entwerfen im historischen Kontext
Responsible	Prof. Dr Caroline Rolka
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Elective module in the 1st semester (2-semester Master's, Path A) Elective module in the 1st/2nd semester (4-semester Master's, Path B)
Frequency and length	Starts every winter semester, one semester in length
Prerequisites	None

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.
Assessments	AP Alternative assessment, presentation 20 minutes in length (weighting 50%) and AP Alternative assessment, poster (weighting 50%)
Assessment prerequisites	Participation in the seminar and workshop (compulsory attendance)

Courses and hours

I	LGM.20.012.1	Designing in the historical environment Seminar, 2 hours per week	32 h
II	LGM.20.012.2	Designing in the historical environment Workshop, 2 hours per week	32 h
III		Independent preparation and revision, including assessment	116 h
		Total:	180 h

Lecturer	Prof. Dr Caroline Rolka
Language of instruction	English
Content	Students work out legal and planning-related conditions like heritage-related objectives, species-protection surveys, landscape conservation programmes in the implementation of planning concepts for historical outdoor spaces through analysis and scientific evaluation. (Analysis of the site with respect to all of the protected natural resources found on the site). The knowledge gained in the process will be applied to a design field on the basis of individual usage, development and care concepts. These concepts are based on interdisciplinary issues of landscape architecture, including greenspace management. For example, connections to the academic content of the modules Care Management and Ecological Engineering. The designs are defended academically in the context of a presentation.
Learning objectives/outcomes	After completing the module, students will be able to: apply legal considerations and aspects that are relevant in a planning context with respect to historical areas or objects (e.g. heritage context) to specific applications and incorporate them into planning concepts. Furthermore, students will acquire the skills necessary for recognising and analysing all other interdisciplinary and use-specific aspects concerning historical outdoor installations, and applying these aspects in the implementation of designs (e.g. environmental-protection issues, species-protection issues, use-specific considerations, climate influences and care-related requirements).

	The learning objective for this module is to be able to gather all relevant data and considerations for a historically relevant outdoor area with high demands in terms of planning, recognise all relevant legal provisions, consider current usage requirements in the creation of a design draft and, on this basis, develop a care- and development plan for the design area.
Teaching and learning methods	Seminar with workshops; short excursion to the planning site; guest lectures; participation in specialist lectures, project-based learning
Literature	Heritage Protection Law (Denkmalschutzgesetz) Mecklenburg-Vorpommern from 1998/2006. The Venice Charta 1963 (ICOMOS) The Venice Charta 1981 (ICOMOS) McLeod: Detail in Contemporary Landscape Architecture, Laurence King Publishing Ltd, 2008. Steenbergen Clemens: Composing Landscapes, Analysis, Typology and Experiments for Design, Birkhäuser, 2008. Cerasella Craciun; Bostenaru-Dan, Maria: Planning and Designing Sustainable and Resilient Landscapes, Springer Verlag, 2014. North, Alica: Operative Landscapes, Birkhäuser Berlin, 2012.

LGM.20.006 Maintenance of Green and Open Spaces

Version	13 May 2020
Module title (German)	Pflege von Vegetationsflächen
Responsible	TBA
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Elective module in the 1st semester (2-semester Master's, Path A) Elective module in the 2nd semester (4-semester Master's, Path B)
Frequency and length	Starts every winter semester, one semester in length
Prerequisites	None

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.
Assessments	AHA Written assignment 15 pages in length
Assessment prerequisites	Participation in the workshop (compulsory attendance)

Courses and hours

I	LGM.20.006.1	Care of green and open spaces as a precondition for the development and preservation of representative and environmentally effective open spaces Lecture, 1 hour per week	16 h
II	LGM.20.006.2	Practical care of green and open spaces Workshop, 1 hour per week	16 h
III	LGM.20.006.3	Care and maintenance of green and open spaces with respect to aesthetics, ecology and social functions Seminar, 2 hours per week	32 h
IV		Independent preparation and revision, including preparation for assessment	116 h
		Total:	180 h

Lecturer	TBA
Language of instruction	English
Content	Follow-up care and developmental care of green and open spaces, particularly functional profiles, quality categories and the intensity targets and measures for plant care; in addition, the course will cover environmental considerations, such as plant vitality and plant protection, and aspects related to historic garden preservation.
Learning objectives/outcomes	Students learn care and maintenance measures for ponds, streams and other bodies of water, ornamental shrubs and trees and grassland with respect to their sustainable development, taking into account the latest scientific developments. Students critically assess the social and use-related functions of green and open spaces. They develop their own ideas on environmental and aesthetic functions and their significance for the practical care of green and open spaces.
Teaching and learning methods	-
Literature	Harris, Charles W., Dines, Nicholas T.; Brown, Kyle D.: *Time-saver standards for landscape architecture: design and construction data,* New Delhi, 2011, McGraw

Hill Education (India) Private Limited

Kingsbury, Noel: Garden Flora: *The Natural and Cultural History of the Plants in Your Garden*, Timber Press, Incorporated, 2016

Fine, Jonathan: *English for Landscaping Professionals*, Berlin [u.a.], 2014, Patzer

LGM.20.013 Documentation, Modelling, Surveying

Version	13 May 2020
Module title (German)	Dokumentation, Modellbau, Vermessungskunde
Responsible	Prof. Dr Philip Caston
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Elective module in the 1st semester (2-semester Master's, Path A) Elective module in the 2nd semester (4-semester Master's, Path B)
Frequency and length	Starts every winter semester, one semester in length
Prerequisites	None

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.
Assessments	AXP Experimental work
Assessment prerequisites	Participation in the internship and seminars (compulsory attendance)

Courses and hours

I	LGM.20.013.1	Documentation or modelling or surveying internship, 3 hours per week	48 h
II	LGM.20.013.2	Documentation or modelling or surveying tuition in seminars, 1 hour per week	16 h
III		Independent preparation and revision, including assessment	116 h
		Total:	180 h

Lecturer	Prof. Dr Philip Caston
Language of instruction	English
Learning objectives/outcomes	Students should learn to independently gain an understanding of the constructive design of a structure and/or the form of the landscape site, and graphically document, and if applicable independently replicate, this constructive design.
Teaching and learning methods	Project-based learning: surveying on site or CAD in the laboratory or modelling in the workshop.
Literature	Burns, J. A. et al.: *Recording Historic Structures*. Washington 1989. Dallas, R. (ed.): *Measured Survey and Building Recording for Historic Buildings and Structures*. Edinburgh 2003. De Jonge, K. & K. Van Balen: *Preparatory Architectural Investigation in the Restoration of Historical Buildings*. Leuven 2002. Driscoll, M.: *Modelmaking for Architects*, Crowood Press 2013. Dunn, N.: *Architectural Modelmaking*, Laurence King Publishing 2010. Werner, M.: *Model Making (Architectural Briefs),* Princeton Architectural Press 2011.

LGM.20.014 Ecological Engineering and Green Infrastructure

Version	13 May 2020
Module title (German)	Ingenieurökologie und Grünflächen Infrastruktur
Responsible	Prof. Dr-Ing. Manfred Köhler
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Elective module in the 1st semester (2-semester Master's, Path A) Elective module in the 1st/2nd semester (4-semester Master's, Path B)
Frequency and length	Starts every winter semester and (in the case of sufficient demand) every summer semester, one semester in length
Prerequisites	None

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.
Assessments	AP Alternative assessment, portfolio
Assessment prerequisites	None

Courses and hours

I	LGM.20.014.1	Ecological Engineering and Green Infrastructure Seminar, 2 hours per week	32 h
II	LGM.20.014.2	Ecological Engineering and Green Infrastructure Workshop, 2 hours per week	32 h
III		Independent preparation and revision	116 h
		Total:	180 h

Lecturer	Prof. Dr-Ing. Manfred Köhler
Language of instruction	English
Content	The course will introduce specific subject areas related to ecological construction, including the following topics: The concept of green infrastructure in Europe. Techniques for the greening of buildings, such as roof planting, facade greening and interior planting. The focus will be on plant selection and the required technique. The subject of building with green will be presented on the basis of the book *Ecodesign* by Ken Yeang. It starts at the building level, but the neighbourhood and municipal level will also be covered. Ecological engineering has a strong connection to the respective water circulation system. In this context, rainwater usage will play an important role. Building with green includes erosion prevention using living construction methods. Protection against erosion is an important aspect of the programme. For all topics, reference is made to the current guidelines from the Landscape Development and Landscaping Research Society (FLL). Efficiency of vegetation structures will be introduced and further examined through individual examples.
Learning objectives/outcomes	At the end of the module, students will be able to utilise an advanced knowledge of ecological building in professional discourse.
Teaching and learning methods	Introductions as systematic overview, short investigations/visits, workshops
Literature	Köhler, M. (ed. 2012) *Handbuch Bauwerksbegrünung*. Rudolf Müller Verlag Dover, John, W. (ed. 2015). *Green Infrastructure*, Routledge, Weiler, S. and Scholz-Barth 2009: *Green roof systems*.

Further information	Ken Yeang, (2006) *Ecodesign*. Wiley, Hoboken, NY Relevant guidelines from the Landscape Development and Landscaping Research Society (FLL)

LGM.20.015 Landscape Architecture in International Comparison

Version	13 May 2020
Module title (German)	Landschaftsarchitektur im internationalen Vergleich
Responsible	Prof. Dr Elke Mertens
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Elective module in the 1st semester (2-semester Master's, Path A) Elective module in the 2nd semester (4-semester Master's, Path B)
Frequency and length	Starts every winter semester, one semester in length
Prerequisites	None

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.
Assessments	AP Alternative assessment, portfolio
Assessment prerequisites	None

Courses and hours

I	LGM.20.015.1	Landscape Architecture in International Comparison Seminar, 4 hours per week	64 h
II		Independent preparation and revision, including preparation for assessment	116 h
		Total:	180 h

Lecturer	Prof. Dr Elke Mertens
Language of instruction	English
Content	- development of landscape architecture in selected countries, - education in landscape architecture in countries in and outside of Europe, - professional practice in the current field of landscape architecture in selected countries, - landscape architecture in the context of current issues, - evaluation of open spaces in the country-specific context, comparative assessment of open spaces in the international context, - scientific handling and visualisation of comparisons.
Learning objectives/outcomes	At the end of the module, students have the ability to analyse and evaluate plans in the context of cultural and country-specific characteristics. They have an advanced understanding for international cooperation in the design process and the ability to independently contribute to international planning projects.
Teaching and learning methods	Seminar

Literature

Booth, Norman K., Hiss, James E: Residential landscape architecture: design process for the private residence, New York, 2018, Pearson
Technische Universität München: out there, landscape architecture on global terrain, Berlin, 2017, Hatje Cantz Verlag

Mertens, Elke: Visualizing Landscape Architecture, Basel, 2010, Birkhäuser

Petrow, Constanze A.: Kritik zeitgenössischer Landschaftsarchitektur: städtische Freiräume im öffentlichen Diskurs, Münster, 2013, Waxmann

LGM.20.016	Visualization and Data Modelling
Version	13 May 2020
Module title (German)	Visualisierung und Datenmodellierung
Responsible	Dean
Credits	6

Degree programmes	LGM	Landscape Studies and Greenspace Management	Version 2020
		Elective module in the 1st semester (2-semester Master's, Path A)	
		Elective module in the 1st/2nd semester (4-semester Master's, Path B)	
Frequency and length	Starts every winter semester and (in the case of sufficient demand) every summer semester, one semester in length		
Prerequisites	Recommended: a basic understanding of and ability to use the CAD software VectorWorks and image-editing software (preferably the Adobe Suite).		

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.	
Assessments	AP	Alternative assessment, portfolio
Assessment prerequisites	None	

Courses and hours

I	LGM.20.016.1	Visualization and Data Modelling Lecture, 1 hour per week	16 h
II	LGM.20.016.2	Visualization and Data Modelling Seminar, 1 hour per week	16 h
III	LGM.20.016.3	Visualization and Data Modelling Workshop, 2 hours per week	32 h
IV		Independent preparation and revision, including preparation for assessment	116 h
		Total:	180 h

Lecturer	Dipl.-Ing. Jens Rupprecht
Language of instruction	English
Content	Visualization Advanced concepts of 3D-modelling and work with intelligent objects, such as from digital terrain models, plants, covering structures etc.; incorporation of GIS; creation of analytical plans; animation and lighting simulation, use of image-editing programmes for postprocessing; implementation in VR/AR. Data modelling Creation and use of tables, list, databases, Building Information Modelling (BIM) methods, operating principles, exchange formats, data transmission and use/incorporation in other programmes. Software VectorWorks (D/EN), SketchUp (D/EN), Cinema4D (D), AdobePhotoshop (D), ArcGIS (D), Solibri (D/EN)
Learning objectives/outcomes	Visualization Students are able to create well-founded 3D models, incorporating external plan data, to make analytical observations and to present these in convincing visualizations.

	Data modelling Students can work confidently with various data structures and are able to create and manage database links in CAD and use them for interdisciplinary cooperation with other people involved in the project.
Teaching and learning methods	-lectures with short presentations of key points using Powerpoint slides and classroom lectures on the computer, -knowledge building through the exploration of topics in seminars, -practical implementation and application in workshops, -independent work after thorough briefing, either individually or in groups, -incorporation of e-learning methods.
Literature	Landscape Institute: *BIM for Landscape*, Abingdon/New York, 2015, Taylor and Francis. Jillian Walliss / Heike Rahmann: *Landscape Architecture and Digital Technologies: Re-conceptualising design and making*, Abingdon/New York, 2015, Taylor and Francis. Bradley E. Cantrell / Justine Holzman: *Responsive Landscapes: Strategies for Responsive Technologies in Landscape Architecture*, Abingdon/New York, 2015, Taylor and Francis. Nadia Amorosso: *Representing Landscapes: Digital*, Abingdon/New York, 2015, Taylor and Francis. Bradley E. Cantrell / Wes Michaels: *Digital Drawing for Landscape Architecture*. New Jersey, 2015, Wiley. Carl Steinitz, *A framework for Geodesign: Changing Geography by Design,* Redlans, 2015, Esri. William R. Miller, *Introducing Geodesign: The Concept*, Esri 2012.

LGM.20.017 International Seminar in Landscape Architecture

Version	13 May 2020
Module title (German)	Internationales Seminar zur Landschaftsarchitektur
Responsible	Prof. Dr Elke Mertens
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Elective module, semester depending on availability The module is only offered if students from the Neubrandenburg University of Applied Sciences take part and the online teaching is ensured or replaced by equivalent classroom teaching.
Frequency and length	Depending on availability, in the winter or summer semester, one semester in length
Prerequisites	None

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.
Assessments	AP Assessment based on specifications of the module provider and recognition by the faculty member responsible for the module.
Assessment prerequisites	None

Courses and hours

I	LGM.20.017.1	International Seminar in Landscape Architecture Online classes, Seminar, 2 hours per week	32 h
II	LGM.20.017.2	International Seminar in Landscape Architecture Tuition in seminars (attendance time, own presentations), 2 hours per week	32 h
III		Independent preparation and revision, including preparation for assessment	116 h
		Total:	180 h

Lecturer	Prof. Dr Elke Mertens, external lecturers, online and direct access
Language of instruction	English
Content	Students acquire an advanced knowledge of the implementation of European guidelines, such as guidelines from the European Landscape Convention and the resulting strategies for international cooperation on the issue of landscape. The choice of subjects is in accordance with the EU funding guidelines for international cooperation. In addition, students acquire an interdisciplinary understanding of the political dimension of the topic and develop possibilities for independent action.
Learning objectives/outcomes	Students are given the opportunity to build a network beyond the Neubrandenburg University of Applied Sciences and understand the mode of action and advantages of international cooperation, as well as their organisational structure for international cooperation on the issue of landscape.
Teaching and learning methods	Online seminar with some classroom tuition in seminars
Literature	Shall be announced by the responsible individual at the beginning of the course.

-	**Module from Another Course (at Neubrandenburg Univ. o. A. S.)**
Version	13 May 2020
Module title (German)	Modul eines anderen Studiengangs der Hochschule Neubrandenburg
Responsible	All lecturers
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2020 Elective module in the 1st semester (2-semester Master's, Path A) Elective module in the 1st/2nd semester (4-semester Master's, Path B)
Frequency and length	See description of module
Prerequisites	Upon request by a student, the Examination Board can allow one of the "Elective Modules" required in the degree programme to be replaced by a module from a different Master's programme at the Neubrandenburg University of Applied Sciences, under the condition that it is worth at least 6 credits.

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.
Assessments	See description of module
Assessment prerequisites	See description of module

Courses and hours

See description of module

Total: 180 h

Lecturer	See description of module
Language of instruction	English or other language, depending on course
Content	See description of module
Learning objectives/outcomes	See description of module For the degree programme in Landscape Studies and Greenspace Management, there is a possibility to learn about the learning and working practices of other degree programmes. In this context, students can also expand and critically reflect on the possibilities associated with their own approach. This offers the opportunity to learn creative, technical or scientific working methods that differ from those taught in the modules offered in the Landscape Studies and Greenspace Management programme and to supplement one's skills.
Teaching and learning methods	See description of module
Literature	See description of module
Further information	-

GGI.19.045 Management in Business and Authorities

Version	13 May 2020
Module title (German)	Management in Unternehmen und Behörden
Responsible	Prof. Dr-Ing. Sven Brämer
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2019 Elective module in the 1st semester (2-semester Master's, Path A) Elective module in the 2nd semester (4-semester Master's, Path B) GGI Master's programme Geodesy and Geoinformatics Elective module in the 1st/2nd semester
Frequency and length	Starts every winter semester, one semester in length
Prerequisites	None

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.
Assessments	SCH Proctored written examination (Klausur), 120 minutes in length
Assessment prerequisites	Accepted preparation of an independent project

Courses and hours

I	GGI.19.045.1	Companies and Public Authorities Lecture, 2 hour per week	32 h
II	GGI.19.045.2	Companies and Public Authorities Workshop, 2 hours per week	32 h
III		Independent Project	20 h
IV		Independent preparation and revision, including preparation for assessment	96 h
		Total:	180 h

Lecturer	Prof. Dr-Ing. Sven Brämer
Language of instruction	English
Content	Activities of companies and public authorities in society, legal environment, services offered, service provision, product lifecycle management, mission, vision, strategy, tactics, operational business, controlling, quality management, risk management, certification, validation, verification, accreditation, liability issues, data privacy, personnel management, international management, response patterns to major disruptions
Learning objectives/outcomes	Students acquire advanced knowledge and fundamental skills that will be associated with the assumption of management responsibilities in future roles. They are confronted with the typical complexity of decisions in companies and government offices. Initiative and team skills are promoted through project work. Instead of teaching ready-made solutions, the course will offer students the opportunity to research and develop modern management methods. After completing the module, students will be able to: - develop options for strategic and operational decisions associated with company and governmental policy. - critically estimate risks and recommend mitigation methods. - take advantage of scopes for action, even in cases of major disruptions or a lack of information.

Teaching and learning methods	Lecture using the board and a projector for introducing contents Exercises with concrete examples for practical implementation Guided self-study for preparation and revision Completion and presentation of an independent project
Literature	Directives of the European Union, relevant to the topic ISO 9001, various Certification Standards, current versions General Data Protection Regulation EU, current version ISO 31000, current version Additional literature will be announced in the lecture (current research articles etc.)
Further information	-

GGI.19.008 Spatial Data Infrastructure

Version	13 May 2020
Module title (German)	Geodateninfrastruktur
Responsible	TBA
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2019 Elective module in the 1st semester (4-semester Master's, Path B) GGI Master's programme Geodesy and Geoinformatics Elective module in the 1st/2nd semester
Frequency and length	Starts every summer semester, one semester in length
Prerequisites	None

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.
Assessments	M Oral examination, 30 minutes in length
Assessment prerequisites	Paper

Courses and hours

I	GGI.19.008.10	Spatial Data Infrastructure Lecture, 2 hour per week	32 h
II	GGI.19.008.20	Spatial Data Infrastructure Workshop, 2 hours per week	32 h
III		Independent preparation and revision	116 h
		Total:	180 h

Lecturer	TBA
Language of instruction	English
Content	Composition and structure, norms and standards, networks, responsibilities, access rights Structure of a small system, study of sources, collection of spatial and factual data, design of a data portal, client-server connection to databases over networks
Learning objectives/outcomes	The students are familiar with the concept of spatial data infrastructure (SDI) and its implementation at European, national, state and municipal level. They know the norms and standards that apply to SDI and are able to apply them. Students know the SDIs that are operated in the state of Mecklenburg-Vorpommern and how to use the important software solutions for SDI. Students are able to administer a municipal spatial data portal, connect and disconnect database servers (in particular professional database servers), programme minor query functions and grant user rights.
Teaching and learning methods	The standard teaching aids will be used for the lectures, including the internet. The practical work experience takes place at the computer and includes the merging of multiple data sources.
Literature	Kresse, Wolfgang, Danko, David: Handbook of Geographic Information, Heidelberg, 2012, Springer.

Mitchell, Tyler, Emde, Astrid, Christl, Arnulf: Web-Mapping mit Open Source-GIS-Tools, Sebastopol (CA, USA), 2008, O'Reilly.

Lupp, Markus: Web Map Service Implementation Specification (WMS), Open Geospatial Consortium-Document 05-078r4, 2007.

Vretanos, Peter: Web Map Feature Service Implementation Specification (WFS), Open Geospatial Consortium-Dokument 04-094, 2004.

Further information -

GGI.19.017 GI-Technologies

Version	13 May 2020
Module title (German)	GI-Technologien
Responsible	Prof. Dr-Ing. Ralf Löwner
Credits	6
Degree programmes	LGM Landscape Studies and Greenspace Management Version 2019 Elective module in the 1st semester (2-semester Master's, Path A) Elective module in the 1st/2nd semester (4-semester Master's, Path B) GGI Master's programme Geodesy and Geoinformatics Elective module in the 1st/2nd semester
Frequency and length	Starts every winter semester and (in the case of sufficient demand) every summer semester, one semester in length
Prerequisites	None

Requirements for the award of credits

Marking and weighting	A mark is awarded for the module. The extent to which the module mark is taken into consideration for the calculation of the overall mark for the degree is specified in the respective Assessment Overview.
Assessments	AHA Project report, 15 pages in length with presentation, 15 minutes in length (weighting 50%) and M Oral examination, 30 minutes in length (weighting 50%)
Assessment prerequisites	None

Courses and hours

I	GGI.19.017.1	GI-Technologies Lecture, 1 hour 15 minutes per week	20 h
II	GGI.19.017.2	GI-Technologies Workshop, 2 hours 15 minutes per week	36 h
III		Papers	20 h
IV		Independent preparation and revision, including preparation for assessment	104 h
		Total:	180 h

Lecturer	Prof. Dr-Ing. Ralf Löwner
Language of instruction	English
Content	Overview of current trends and developments in the field of geoinformatics (mobile GIS, internet GIS, open source and open GIS); use of these technologies in various land management systems; the workshops consist of projects from various fields, such as land-use management, risk management, agriculture, urban development, development cooperation, health management, tourism, resource planning, geology, archaeology and road research.
Learning objectives/outcomes	Students understand current GI developments and have applied them in various practical application areas.
Teaching and learning methods	The basic theoretical principles for the respective application are discussed in the lectures and applied in the workshops;

	the University's e-learning platform is used for giving assignments, sharing supplementary information and grading practical work. The practical work experience takes place at the computer and includes the merging of multiple data sources.
Literature	Bill, R.: *Grundlagen der Geo-Informationssysteme*. Wichmann Verlag, 5th edition 2010; Konecny: *Geographic Information and Cartography for Risk and Crisis Management: Towards Better Solutions* (Lecture Notes in Geoinformation and Cartography), Springer, 2012 Ramm F., Topf J.: *OpenStreetMap: Die freie Weltkarte nutzen und mitgestalten*. Lehmans Media Verlag, 3rd edition, 2010; Current editions of the respective literature and developments associated with the topics covered.
Further information	-