



***Please note: English translations of Modulbeschreibungen (Module Catalogue) are intended solely as a convenience to non-German-reading students/members of the university. Only the German text published on the university's website on 19/11/2019 is legally binding. In the event of any conflict between the English and German text, its structure, meaning or interpretation, the German text, its structure, meaning or interpretation shall prevail.***

Appendix 2 of the Neubrandenburg University of Applied Sciences postgraduate master degree course:

*Landscape Architecture and Greenspace Management -  
Course Regulations*

Graduate degree course (master):

Landscape Architecture and Greenspace Management

**Module Catalogue**

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SWH = academic hour per week per semester

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- 1) Students without a proficiency in the German language (less than GER B2 or equivalent) take the compulsory module „German for International Students“. All other students (with a proficiency in the German Language above GER B2 or equivalent) take the module "Foreign Language".

1	<b>LGM.19.001</b>	<b>Dendrology and Planting Design</b>	
2	German module name	Version: 29.05.2019 Gehölzkunde und Bepflanzungsplanung	
3	Person responsible	Prof. Dr. Caroline Rolka	
4	Credits	6	
5	Course	LGM Landscape Architecture and Greenspace Management	Version 2019
		Compulsory module in the first semester (4-semester course, path B)	
6	Frequency / duration	Begins every summer semester / one semester	
7	Prerequisites	None	
8	<b>Results required to attain credits</b>		
9	Grades and weighting	This modul is graded. The module grade is weighted in the overall course grade as described in the examination table.	
10	Type of assessment	SCH Written exam (120 minutes duration).	
	Requiements	Attendance is mandatory in the seminar as described in the exam regulations.	
12	<b>Type of instruction and workload</b>		
I	LGM.19.001.10	Knowledge of woody plants most used in urban open spaces in Germany Seminar, 2 SWH	32 h
II	LGM.19.001.20	The use of trees, shrubs, roses and perennials in open space planning Exercises, 2 SWH	32 h
III		Independent study	116 h
			Total: 180 h
13	Lecturer	Prof. Dr. Caroline Rolka, N.N.	
14	Language of instruction	English	
15	Content	Knowledge of woody plants commonly used in German open space design, Planting design	
16	Learning target	Knowledge of woody plants, knowledge of plant uses and organization of planting design	
7	Remarks	Seminars and exercises	
18	Relevant literature	Wöhrle, Regine Ellen und Hansjörg Wöhrle: <i>Basics Designing with Plants</i> , Basel Boston Berlin, 2017 Birkhäuser Robinson, Nick: <i>The planting design handbook</i> , London ; New York, 2016, Routledge, Taylor & Francis Group Oudolf, Piet: <i>a journey through a plantsman's life</i> , New York, 2015, Monacelli Press.	

1	<b>LGM.19.002</b>	<b>Landscaping and Materials</b>	
2	German module name	Version: 16.11.2018 Bauweisen und Materialien im Landschaftsbau	
3	Person responsible	N.N.	
4	Credits	6	
5	Course	LGM	Landscape Architecture and Greenspace Management Compulsory module in first semester (4-semester course, path B) Version 2019
6	Frequency / duration	Begins every summer semester / one semester	
7	Prerequisites	None	
8	<b>Results required to attain credits</b>		
9	Grades and weighting	This modul is graded. The module grade is weighted in the overall course grade as described in the examination table.	
10	Type of assessment	SCH	Written exam (120 minutes duration)
11	Requiements	Attendance is mandatory in the seminar as described in the exam regulations.	
12	<b>Type of instruction and workload</b>		
I	LGM.19.002.10	Construction methods in landscaping Lecture, 1 SWH	16 h
II	LGM.19.002.20	Construction methods in landscaping Exercises, 1 SWH	16 h
III	LGM.19.002.30	Use of materials in landscaping Lecture, 1 SWH	16 h
IV	LGM.19.002.40	Use of materials in landscaping Exercises, 2 SWS	16 h
V		Independent study	116 h
			<b>Total: 180 h</b>
13	Lecturer	N.N.	
14	Language of instruction	English	
15	Content	Earthworks, soil, planting, sowing and soil works, course and road construction, staircase construction and water systems. Use of wood, stone, concrete, metal, plastic, sustainable landscaping.	
16	Learning target	The students get to know the most used materials and construction methods of landscaping and can apply them in their own design.	
17	Remarks	-.	
18	Relevant literature	Harris, Charles W., Dines, Nicholas T.; Brown, Kyle D.: <i>Time-saver standards for landscape architecture: design and construction data</i> New Delhi, 2011, McGraw Hill Education (India) Private Limited Fraser, Gordon Rowland : <i>Landscape Professional Practice</i> , Farnham, Surrey, Ashgate, 2014 Fine, Jonathan: <i>English for Landscaping Professionals</i> , Berlin [u.a.], 2014, Patzer u.a.m.	



1	<b>LGM.19.004</b>	<b>Foreign Language</b>	
2	German module name	Version: 16.11.2018	
3	Person responsible	Fremdsprache	
4	Credits	Language Centre	
		6	
5	Course	LGM Landscape Architecture and Greenspace Management	Version 2019
		Compulsory module in first Semester (4-semester course, path B)	
6	Frequency / duration	Begins every summer semester / one semester	
7	Prerequisites	Compulsory module for students with a proficiency in German [above GER B2 or equivalent international standard]]	
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8	<b>Results required to attain credits</b>		
9	Grades and weighting	This module is graded. The module grade is weighted in the overall course grade as described in the examination table.	
10	Type of assessment	SCH Written exam (90 minutes duration) or M Oral exam (30 minutes duration)	
11	Requirements	None	
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12	<b>Type of instruction and workload</b>		
	I LGM.19.004.10	Foreign Language I Seminar, 4 SWH	64 h
	II	Literature studies	32 h
	III	Independent study	84 h
			Total: 180 h
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13	Lecturer	Language Centre	
14	Language of instruction	English – Foreign language	
15	Content	English: Trade and professional magazines (Grain, Nature, Science, The Ecologist), further magazines: Economist. Online audio books based on magazines and literature. Other languages: Audio books and magazine based topics (Science et vie; National geographic (Spanish, French),online audio books and films.	
16	Learning target	Gain knowledge of foreign language, consolidation and extension of language and culture, specialist (course-related) vocabulary, idioms, phrases and expressions.	
17	Remarks	Audio and visual presentations (with use of projectors), audio books transmitted via quality installations. The instruction is largely based on the Lern Management System.	
18	Relevant literature	-	
19	Further information	The modul Foreign Language I can consist of language modules currently offered by the university.	

1	-	<b>Elective Module 1</b>
2	German module name	Version: 16.11.2018 Wahlpflichtmodul 1
3	Person responsible	See module description below
4	Credits	6
5	Course	LGM Landscape Architecture and Greenspace Management Version 2019 Compulsory module in first Semester (4-semester course, path B)
6	Frequency / duration	Begins every summer semester / one semester
7	Prerequisites	None
8	<b>Results required to attain credits</b>	
9	Grades and weighting	See module description below
10	Type of assessment	See module description below
11	Requirements	See module description below
12	<b>Type of instruction and workload</b>	
		See module description below
		Total: 180 h
13	Lecturer	See module description below
14	Language of instruction	English
15	Content	See module description below
16	Learning target	See module description below
17	Remarks	See module description below
18	Relevant literature	See module description below
19	Further information	See module description below

1	-	<b>Elective Module 2</b>
2	German module name	Version: 16.11.2018 Wahlpflichtmodul 2
3	Person responsible	See module description below
4	Credits	6
5	Course	LGM Landscape Architecture and Greenspace Management Version 2019 Compulsory module in first Semester (4-semester course, path B)
6	Frequency / duration	Begins every summer semester / one semester
7	Prerequisites	None
8	<b>Results required to attain credits</b>	
9	Grades and weighting	See module description below
10	Type of assessment	See module description below
11	Requirements	See module description below
12	<b>Type of instruction and workload</b>	
		See module description below
		Total: 180 h
13	Lecturer	See module description below
14	Language of instruction	English
15	Content	See module description below
16	Learning target	See module description below
17	Remarks	See module description below
18	Relevant literature	See module description below
19	Further information	See module description below

1	<b>LGM.19.005</b>	<b>Greenspace Management</b>	
2	German module name	Version: 16.11.2018 Grünflächenmanagement	
3	Person responsible	Prof. Dr. Elke Mertens	
4	Credits	6	
5	Course	LGM	Landscape Architecture and Greenspace Management    Version 2019 Compulsory module in first Semester (2-semester course, path A) Compulsory module in second Semester (4-semester course, path B)
6	Frequency / duration	Begins every winter semester / one semester	
7	Prerequisites	Knowledge of plants	
8	<b>Results required to attain credits</b>		
9	Grades and weighting	This modul is graded. The module grade is weighted in the overall course grade as described in the examination table.	
10	Type of assessment	AP	Development of a maintenance plan  Students and the examination office are informed by the course lecturer during the first weeks of the semester as to the type and extent of coursework required to pass the module examination (see section 12 (2) of the Framework Examination Regulations).
11	Requirements	None	
12	<b>Type of instruction and workload</b>		
	I	LGM.19.005.10	Maintenance of trees Seminar, 2 SWH
			32 h
	II	LGM.19.005.20	Maintenance of green and open spaces Lectures, 2 SWH
			32 h
	III		Independent study
			116 h
			Total: 180 h
13	Lecturer	Prof. Dr. Elke Mertens	
14	Language of instruction	English	
15	Content	Students learn about the most important measures for the maintenance of sustainable and high-quality green areas. In the process, designs should be considered with regard to maintenance as well as economic efficiency. Cost accounting and valuation provide the basis for the calculation of long-term green space management.	
16	Learning target	Students should work out the maintenance required for trees, green areas and open spaces and develop plans for their long-term preservation.	
17	Remarks	None	
18	Relevant literature	European Arboricultural Council: <i>European Tree Worker: Handbook</i> . Berlin; Hannover, 2016, Patzer Verlag Roloff, Andreas: <i>Urban tree management for the sustainable development of green cities</i> , Oxford, Chichester, Hoboken, NJ, 2016, John Wiley & Sons, Blackwell Pruetz, R.: <i>Lasting Value: Open Space Planning and Preservation Successes</i> , 2012 Senatsverwaltung Berlin: <i>Handbuch Gute Pflege</i> , 2018.	

1	<b>LGM.19.006</b>	<b>Maintenance of Green Spaces</b>	
2	German module name	Pflege von Vegetationsflächen	
3	Personal responsible	N.N.	
4	Credits	6	
5	Course	LGM Landscape Architecture and Greenspace Management	Version 2019 Compulsory module in first Semester (2-semester course, path A) Compulsory module in second Semester (4-semester course, path B)
6	Frequency / Duration	Begins every winter semester / one semester	
7	Prerequisites	None	
8	<b>Results required to attain credits</b>		
9	Grades and weighting	This module is graded. The module grade is weighted in the overall course grade as described in the examination table.	
10	Type of assessment	SCH Written exam (120 minutes duration)	
11	Requirements	Attendance is mandatory in the seminar as described in the exam regulations.	
12	<b>Type of instruction and workload</b>		
	I LGM.19.006.10	Maintenance of green spaces Lecture, 1 SWH	16 h
	II LGM.19.006.20	Maintenance of green spaces Exercise, 1 SWH	16 h
	III LGM.19.006.30	Maintenance of green spaces Seminar, 2 SWH	32 h
	IV	Independent study	116 h
			Total: 180 h
13	Lecturer	N.N.	
14	Language of instruction	English	
15	Content	Maintenance of newly built and existing open spaces, special plant care measures, machinery and equipment for the care measures.	
16	Learning target	Students learn about maintenance measures for newly built as well as existing open and green areas with special regard to their sustainable development.	
17	Remarks	-	
18	Relevant literature	Harris, Charles W., Dines, Nicholas T.; Brown, Kyle D.: <i>Time-saver standards for landscape architecture: design and construction data</i> , New Delhi, 2011, McGraw Hill Education (India) Private Limited Kingsbury, Noel: <i>Garden Flora: The Natural and Cultural History of the Plants in Your Garden</i> , Timber Press, Incorporated, 2016 Fine, Jonathan: <i>English for Landscaping Professionals</i> , Berlin [u.a.], 2014, Patzer.	



1	-	<b>Elective Module 3</b>
2	German module name	Version: 16.11.2018 Wahlpflichtmodul 3
3	Person responsible	See module description below
4	Credits	6
5	Course	LGM Landscape Architecture and Greenspace Management Version 2019 Compulsory module in first Semester (2-semester course, path A) Compulsory module in second Semester (4-semester course, path B)
6	Frequency / duration	Begins every winter semester / one semester
7	Prerequisites	None
8	<b>Results required to attain credits</b>	
9	Grades and weighting	See module description below
10	Type of assessment	See module description below
11	Requirements	See module description below
12	<b>Type of instruction and workload</b>	
		See module description below
		Total: 180 h
13	Lecturer	See module description below
14	Language of instruction	English
15	Content	See module description below
16	Learning target	See module description below
17	Remarks	See module description below
18	Relevant literature	See module description below
19	Further information	See module description below

1	-	<b>Elective Module 4</b>
2	German module name	Version: 16.11.2018 Wahlpflichtmodul 4
3	Person responsible	See module description below
4	Credits	6
5	Course	LGM Landscape Architecture and Greenspace Management Version 2019 Compulsory module in first Semester (2-semester course, path A) Compulsory module in second Semester (4-semester course, path B)
6	Frequency / duration	Begins every winter semester / one semester
7	Prerequisites	None
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8	<b>Results required to attain credits</b>	
9	Grades and weighting	See module description below
10	Type of assessment	See module description below
11	Requirements	See module description below
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12	<b>Type of instruction and workload</b>	
		See module description below
		Total: 180 h
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13	Lecturer	See module description below
14	Language of instruction	English
15	Content	See module description below
16	Learning target	See module description below
17	Remarks	See module description below
18	Relevant literature	See module description below
19	Further information	See module description below

1	<b>LGM.19.008</b>	<b>Internship (incl. Preparation and Debriefing)</b>	
2	German module name	Version: 16.11.2018 Praktikumssemester (inkl. Vor.- und Nachbereitung).	
3	Person responsible	Prof. Dipl.-Ing. Johann Fröhlich	
4	Credits	30	
5	Course	LGM	Landscape Architecture and Greenspace Management    Version 2019 Compulsory module in third Semester (4-semester course, path B)
6	Frequency / duration	Begins every summer semester / one semester	
7	Prerequisites	None	
8	<b>Results required to attain credits</b>		
9	Grades and weighting	This module is graded. The module grade is weighted in the overall course grade as described in the examination table.	
10	Type of assessment	AHA    Internship report with a minimum of 20 pages and APP    Presentation with a minimum duration of 20 Minutes	
11	Requirements	Approval of the internship organisation by the internship coordinator, a minimum compulsory attendance of 20 weeks in an internship, compulsory attendance in the preparation and debriefing tutorials	
12	<b>Type of instruction and workload</b>		
	I    LGM.19.008.10	Internship semester Internship, minimum of 20 weeks	868 h
	II   LGM.19.008.20	Internship semester (Preparation and debriefing, official visits) Tutorial, 2 SWH	32 h
			Total: 900 h
13	Lecturer	Prof. Dipl.-Ing. Johann Fröhlich	
14	Language of instruction	English	
15	Content	Teamwork treatment of specialist topics and issues. Application of academic, planning and artistic methods and procedures in the field of professional practice. Evaluation of processes and areas of conflict in professional practice. Close collaboration with other team members. Processing professional topics and issues in planning, TAI, object monitoring or construction management. Work processes in professional practice. Translation of knowledge gained into the academic environment.	
16	Learning target	Consolidation of existent knowledge by working with partners from professional practice. Application of theoretical planning knowledge. Teamwork / capacity for teamwork. Interdisciplinary business. Insight into the practices of professional garden and landscape architects, green space authorities and related organisations, landscaping or comparable horticulture companies and collecting of practical experience.	
17	Remarks	Practical work with compulsory daily attendance in the internship organisation. The internship is accompanied by preparatory tutorials and a debriefing. Documentation by practice report. The internship is supported by an organisation supervisor. The university internship coordinator monitors the whole process from the preparation to the debriefing. The language spoken is country and institution specific.	
18	Relevant literature	Literature pertinent to the tasks at hand. Planning documents and information provided by the host institution.	

1	<b>LGM.19.009</b>	<b>Masterthesis incl. Defence Colloquium</b>	
2	German module name	Version: 16.11.2018 Master-Arbeit inklusive Kolloquium	
3	Person responsible	all	
4	Credits	30 (22,5 + 7,5)	
5	Course	LGM	Landscape Architecture and Greenspace Management    Version 2019 Compulsory module in second Semester (2-semester course, path A) Compulsory module in fourth Semester (4-semester course, path B)
6	Frequency / duration	Begins every summer and winter semester / one semester	
7	Prerequisites	A minimum of 84 credits including the module „Internship“ (path B) or a minimum of 24 credits (path A)	
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8	<b>Results required to attain credits</b>		
9	Grades and weighting	This module is graded. The module grade is weighted in the overall course grade as described in the examination table.	
10	Type of assessment	MA	Masterthesis, weighted: 22,5 credits and
		AKQ	Colloquium (max. 60 minutes), weighted: 7,5 credits
11	Requirements	The masterthesis has to be graded with a pass mark.	
<hr/>			
12	<b>Type of instruction and workload</b>		
	I	Masterthesis	660 h
	II	Colloquium	240 h
			Total: 900 h
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13	Lecturer	Lecturers from the LG department	
14	Language of instruction	English	
15	Content	Independent processing of an academic task or problem in the field of landscape architecture and/or greenspace management under the guidance of a lecturer.	
16	Learning target	The thesis proves the students competence in solving a specialised problem using academic /scientific methods in a set period of time. The student is capable of presenting the contents of the thesis in a clear and understandable written and oral way.	
17	Remarks	-	
18	Relevant literature	Topic related.	
19	Further information	Refer to the Framework Study Regulations and the Landscape Architecture and Greenspace Management Course study Regulations.	

# Elective Module Catalogue

1	<b>LGM.19.010</b>	<b>Design Studio 1</b>	
2	German module name	Version: 16.11.2018 Projekt 1	
3	Person responsible	All course lecturers	
4	Credits	6	
5	Course	LGM Landscape Architecture and Greenspace Management Elective module in first semester (4-semester course, path B)	Version 2019
6	Frequency / duration	Begins every summer semester / one semester	
7	Requirements	None	
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8	<b>Results required to attain credits</b>		
9	Grades and weighting	This module is not graded.	
10	Type of assessment	AP Coursework	
		Students and the examination office are informed by the course lecturer during the first weeks of the semester as to the type and extent of coursework required to pass the module examination (see section 12 (2) of the Framework examination regulations).	
11	Requirements	None	
<hr/>			
12	<b>Type of instruction and workload</b>		
I	LGM.19.010.10	Design Studio 1 Seminar, 1 SWH	16 h
II	LGM.19.010.20	Design Studio 1 Tutorial, 3 SWH	48 h
III		Independent study	116 h
			Total: 180 h
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13	Lecturer	All course lecturers	
14	Language of instruction	English	
15	Content	Solving a specific planning problem related to landscape architecture. Execution of the various steps and processes starting with a survey of the situation through to a complete final design. Analysis of design problems and conflicts. Independent and group orientated problem solving of planning problems.	
16	Learning target	Ability to work in a team and independently. Knowledge of planning procedures and design principles. Knowledge of aims and collaborators in the field of landscape architecture. Ability to apply practical solution to theoretical problems. Realisation of knowledge gained through a design solution. Specialised knowledge in distinctive landscape architecture topics.	
17	Remarks	Projects worked on individually or in groups	
18	Relevant literature	Topic related.	

1	<b>LGM.19.011</b>	<b>Design Studio 2</b>	
2	German module name	Version: 16.11.2018 Projekt 2	
3	Person responsible	All course lecturers	
4	Credits	6	
5	Course	LGM Landscape Architecture and Greenspace Management Elective module in first semester (2-semester course, path A) Elective module in second semester (4-semester course, path B)	Version 2019
6	Frequency / duration	Begins every winter semester / one semester	
7	Requirements	None	
8	<b>Results required to attain credits</b>		
9	Grades and weighting	This module is graded. The module grade is weighted in the overall course grade as described in the examination table.	
10	Type of assessment	AP Coursework	
		Students and the examination office are informed by the course lecturer during the first weeks of the semester as to the type and extent of coursework required to pass the module examination (see section 12 (2) of the Framework examination regulations).	
11	Requirements	None	
12	<b>Type of instruction and workload</b>		
	I LGM.19.011.10	Topic Introduction Seminar, 1 SWH	16 h
	II LGM.19.011.20	Solution development Tutorial, 3 SWH	48 h
	III	Independent study	116 h
			Total: 180 h
13	Lecturer	All course lecturers	
14	Language of instruction	English	
15	Content	Solving a specific planning problem related to landscape architecture. Execution of the various steps and processes starting with a survey of the situation through to a complete final design. Analysis of design problems and conflicts. Independent and group orientated problem solving of planning problems.	
16	Learning target	Ability to work in a team and independently. Knowledge of planning procedures and design principles. Knowledge of aims and collaborators in the field of landscape architecture. Ability to apply practical solution to theoretical problems. Realisation of knowledge gained through a design solution. Specialised knowledge in distinctive landscape architecture topics.	
17	Remarks	Projects worked on individually or in groups	
18	Relevant literature	Topic related.	



1	<b>LGM.19.013</b>	<b>Documentation, Modeling, Surveying</b>	
2	German Module name	Version: 16.11.2018	
3	Person responsible	Dokumentation, Modellbau, Vermessungskunde	
4	Credits	Prof. Dr. Philip Caston	
		6	
5	Course	LGM Landscape Architecture and Greenspace Management	Version 2019
		Elective module in first semester (2-semester course, path A)	
		Elective module in second semester (4-semester course, path B)	
6	Frequency / duration	Begins every Winter semester / one semester	
7	Prerequisites	None	
8	<b>Results required to attain credits</b>		
9	Grades and weighting	This module is graded. The module grade is weighted in the overall course grade as described in the examination table.	
10	Type of assessment	AP Coursework	
		Students and the examination office are informed by the course lecturer during the first weeks of the semester as to the type and extent of coursework required to pass the module examination (see section 12 (2) of the Framework Examination Regulations).	
11	Requirements	Attendance is mandatory in the seminar as described in the exam regulations	
12	<b>Type of instruction and workload</b>		
	I LGM.19.013.10	Documentation or Model Building or Surveying Practical work, 3 SWH	48 h
	II LGM.19.013.20	Documentation or Model Building or Surveying Tutorials, 1 SWH	16 h
	III	Independent study	116 h
			Total: 180 h
13	Lecturer	Prof. Dr. Philip Caston	
14	Language of instruction	English	
15	Content	Students examine predefined historic structures or consider their development during the tutorial and practical work. Building documentation, model making and surveying are the three possible methods used to comprehend the construction. Preparing a construction drawing in CAD (2D-/3D-CAD model) of a predefined structure precedes the building of a wooden model. Structural wooden models are made at a scale of 1:20.	
16	Learning target	Students should capture basic about the construction of a structure and/or the form of a landscape and document this in drawn form or in the form of a model.	
17	Remarks	Surveying on site or CAD in the classroom or Model building in the workshop.	
18	Relevant literature	Burns, J. A. et al.: <i>Recording Historic Structures</i> . Washington 1989. Dallas, R. (ed.): <i>Measured Survey and Building Recording for Historic Buildings and Structures</i> . Edinburgh 2003. De Jonge, K. & K. Van Balen: <i>Preparatory Architectural Investigation in the Restoration of Historical Buildings</i> . Leuven 2002. Driscoll, M.: <i>Modelmaking for Architects</i> , Crowood Press 2013. Dunn, N.: <i>Architectural Modelmaking</i> , Laurence King Publishing 2010. Werner, M.: <i>Model Making (Architectural Briefs)</i> , Princeton Architectural Press 2011.	

1	<b>LGM.19.014</b>	<b>Ecological Engineering and Green Infrastructure</b>	
2	German module name	Version: 16.11.2018	
3	Person responsible	Ingenieurökologie und Grünflächen Infrastruktur	
4	Credits	Prof. Dr.-Ing. Manfred Köhler	
5	Course	LGM	Landscape Architecture and Greenspace Management Version 2019 Elective module in first semester (2-semester course, path A) Elective module in first / second semester (4-semester course, path B)
6	Frequency / duration	Begins every winter semester (and summer semester if required) / one semester	
7	Prerequisites	None	
8	<b>Results required to attain credits</b>		
9	Grades and weighting	This module is graded. The module grade is weighted in the overall course grade as described in the examination table.	
10	Type of assessment	SCH	Written exam (120 minutes duration)
11	Requirements	None	
12	<b>Type of instruction and workload</b>		
I	LGM.19.014.10	Ecological Engineering and Green Infrastruktur Seminar, 2 SWH	32 h
II	LGM.19.014.20	Ecological Engineering and Green Infrastruktur Exercises, 2 SWH	32 h
III		Independent study	116 h
			Total: 180 h
13	Lecturer	Prof. Dr.-Ing. Manfred Köhler	
14	Language of instruction	English	
15	Content	Selected examples of ecological building are presented. This module will include the following topics: The concept of a green infrastructure in Europe; Green building technologies, such as greenroofs,- facades and –interiors. In addition to the choice of planting, the relevant technology will be given priority. Building with green will refer to Ken Yeang's book "Ecodesign". The module begins with a building level, residential areas and cities will also be discussed. Ecological engineering is strongly connected to the hydrologic cycle. Rainwater management plays a significant role. Green construction embraces combating erosion with the help of living organisms. Erosion control rounds off the module. All the aforementioned topics contain references to the current FLL regulations.	
16	Learning target	The performances of vegetable compositions are introduced. Individual cases are studied in detail.	
17	Remarks	Introductions as a systematic summary, reconnaissances/visits, exercises.	
18	Relevant literature	Köhler, M. (ed. 2012) <i>Handbuch Bauwerksbegrünung</i> . Rudolf Müller Verlag Dover, John, W. (ed. 2015). <i>Green Infrastructure</i> , Routledge, Weiler, S. u. Scholz-Barth 2009: <i>Green roof systems</i> . Ken Yeang, (2006) <i>Ecodesign</i> . Wiley, Hoboken, NY.	
19	Further information	Related FLL-Regulations.	

1	<b>LGM.19.015</b>	<b>Landscape Architecture in International Comparison</b>	
2	German module name	Version: 16.11.2018 Landschaftsarchitektur im internationalen Vergleich	
3	Person responsible	Prof. Dr. Elke Mertens	
4	Credits	6	
5	Course	LGM	Landscape Architecture and Greenspace Management    Version 2019 Elective module in first semester (2-semester course, path A) Elective module in second semester (4-semester course, path B)
6	Frequency / duration	Begins every winter semester / one semester	
7	Prerequisites	None	
8	<b>Results required to attain credits</b>		
9	Grades and weighting	This module is graded. The module grade is weighted in the overall course grade as described in the examination table.	
10	Type of assessment	AP	Coursework
		Students and the examination office are informed by the course lecturer during the first weeks of the semester as to the type and extent of coursework required to pass the module examination (see section 12 (2) of the Framework Examination Regulations).	
11	Requirements	None	
12	<b>Type of instruction and workload</b>		
	I	LGM.19.015.10	Landscape Architecture in International Comparison Seminar, 4 SWH
			64 h
	II		Independent study
			116 h
			Total: 180 h
13	Lecturer	Prof. Dr. Elke Mertens	
14	Language of instruction	English	
15	Content	History of landscape architecture in various countries, education in landscape architecture in European and other countries, landscape architecture in practice in various countries, landscape architecture in the context of current issues. Appraisal of free spaces and the environment in a regional context, comparative evaluation of free spaces and the environment in an international context.	
16	Learning target	Ability to capture and assess designs in the context of cultural and regional characteristics, comprehension of cross-border collaboration in the design process, ability to contribute to transnational/ international designs.	
17	Remarks	-	
18	Relevant literature	Booth, Norman K., Hiss, James E: <i>Residential landscape architecture: design process for the private residence</i> , New York, 2018, Pearson Technische Universität München: <i>out there, landscape architecture on global terrain</i> , Berlin, 2017, Hatje Cantz Verlag Mertens, Elke: <i>Visualizing Landscape Architecture</i> , Basel, 2010, Birkhäuser Petrow, Constanze A.: <i>Kritik zeitgenössischer Landschaftsarchitektur: städtische Freiräume im öffentlichen Diskurs</i> , Münster, 2013, Waxmann	

1	<b>LGM.19.016</b>	<b>Visualization and Data Modeling</b>	
2	German module name	Version: 29.05.2019 Visualisierung und Datenmodellierung	
3	Person responsible	Dekan*in	
4	Credits	6	
5	Course	LGM Landscape Architecture and Greenspace Management Version 2019 Elective module in first semester (2-semester course, path A) Elective module in first / second semester (4-semester course, path B)	
6	Frequency / duration	Begins every winter semester (and summer semester if required) / one semester	
7	Prerequisites	Basic knowledge of and competency in 2D/3D CAD and digital image editing software (preferably VectorWorks and Adobe products)	
8	<b>Results required to attain credits</b>		
9	Grades and weighting	This module is graded. The module grade is weighted in the overall course grade as described in the examination table.	
10	Type of assessment	AHA Coursework including at minimum of two large scale plans and five pages of written text and APP Presentation of the final results (15 Minutes duration)	
11	Requirements	None	
12	<b>Type of instruction and workload</b>		
	I LGM.19.016.10	Visualisation Lecture, 1 SWH	16 h
	II LGM.19.016.20	Visualisation Exercise, 1 SWH	16 h
	III LGM.19.016.30	Data Modeling Lecture, 1 SWH	16 h
	IV LGM.19.016.40	Data Modeling Exercise, 1 SWH	16 h
	V	Independent study and coursework	116 h
			Total: 180 h
13	Lecturer	Dipl.-Ing. Jens Rupprecht, N.N.	
14	Language of instruction	English	
15	Content	<p>Visualisation Advanced 3D-Modeling of objects and the construction of a digital terrain model (DTM); application of textures, light, setting up photo-realistic images, rendering, animation and lighting simulation, application of digital image software and post production; Multimedia presentations and virtual reality; GIS incorporation, geodesign – methods and examples (VectorWorks, SketchUp, Cinema4D, AdobePhotoshop, ArcGIS)</p> <p>Data Modeling Tables, lists, databases, Building Information Modeling (BIM) - methods, operating principles, exchange formats, Data exchange and use in other software and fields.</p>	
16	Learning target	<p>Visualisation Students should be capable of selecting and using the correct methods required for the visualisation of a project and to produce a finished presentation.</p>	

#### Data Modeling

Students work with a variety of data structures, learn to connect databases with CAD, administer the data exchange and utilize interdisciplinary exchange with other team members.

- 17 Remarks Interactive lectures using powerpoint, alternatively PC tutorial; individual use of lecture material in subsequent exercises or in groups; eLearning, Cloud use.
- 18 Relevant literature
- Rosenberger (2013): *Digitale Gestaltung von Plänen in der Landschaftsarchitektur*. Hochschulbibliothek Neubrandenburg.
  - Mertens (2009): *Landschaftsarchitektur visualisieren: Funktionen, Konzepte, Strategien*. Birkhäuser.
  - Cantrell/Michaels (2014): *Digital Drawing for Landscape Architecture*. Verlag Wiley.
  - Steinitz, *A framework for geodesign : changing geography by design ; [the people of the place, design professions, geographic sciences, information technologies] / Carl Steinitz.*
  - William R. Miller, *Introducing Geodesign: The Concept*, Esri 2012.
  - Egger/Hausknecht/Liebich/Przybylo: *BIM-Leitfaden für Deutschland*, Bundesinstituts für Bau-, Stadt- und Raumforschung (BBSR) im Bundesamt für Bauwesen und Raumentwicklung (BBR), 2013.
  - KAI VON LUCKWALD / STEFAN TEMMEN: *Einführung und Nutzung von BIM in der Landschaftsarchitektur – Entwicklungspotentiale und Handlungsempfehlungen*, Hochschule Osnabrück 2016.

1	-	<b>Module from another Course (at Neubrandenburg Univ. o. A. S.)</b>
2	German module name	Version: 16.11.2018 Modul eines anderen Studiengangs der Hochschule Neubrandenburg
3	Person responsible	All lecturers
4	Credits	6
5	Course	LGM Landscape Architecture and Greenspace Management Version 2019 Compulsory module in first Semester (2-semester course, path A) Compulsory module in first / second Semester (4-semester course, path B)
6	Frequency / duration	See module description below
7	Prerequisites	Having chosen a module from another masters degree course at Neubrandenburg Univ. o. A. S. with six credits, the student is required to apply to the Examination Office for permission to study it. The final decision is made by the Examination Committee.
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8	<b>Results required to attain credits</b>	
9	Grades and weighting	This module is graded. The module grade is weighted in the overall course grade as described in the examination table.
10	Type of assessment	See module description below
11	Requirements	See module description below
<hr/>		
12	<b>Type of instruction and workload</b>	
		See module description below
		Total: 180 h
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13	Lecturer	See module description below
14	Language of instruction	English or according to the module description
15	Content	See module description below
16	Learning target	As part of their education in landscape architecture and greenspace management, students are given the opportunity to experience ways of studying and practices employed in other courses as a method of critical reflection of their own procedures and operations.  In this way additional creative, technical or other academic procedures are gained, which add to their abilities, skill and competencies.
17	Remarks	See module description below
18	Relevant literature	See module description below
19	Further information	-

1	<b>GGI.19.045</b>	<b>Management in Business and Authorities</b>	
2	German module name	Version: 16.11.2018 Management in Unternehmen und Behörden	
3	Person responsible	Prof. Dr.-Ing. Sven Braemer	
4	Credits	6	
5	Course	LGM	Landscape Architecture and Greenspace Management      Version 2019 Elective module in first semester (2-semester course, path A) Elective module in second semester (4-semester course, path B)
		GGI	Geodesy and Geoinformatics      Version 2013 Elective module in first / second semester
6	Frequency / duration	Begins every winter semester / one semester	
7	Prerequisites	None	
8	<b>Results required to attain credits</b>		
9	Grades and weighting	This modul is graded. The module grade is weighted in the overall course grade as described in the examination table.	
10	Type of assessment	SCH    Written exam (120 minutes duration)  The examiner defines the exam at the beginning of the course.	
11	Requirements	Accepted written presentation of a chosen project	
12	<b>Type of instruction and workload</b>		
	I	GGI.19.045.10	Enterprises and Authorities      28 h Lectures, 2 SWH
	II	GGI.19.045.20	Enterprises and Authorities      28 h Exercises, 2 SWH
	III		Project work      20 h
	IV		Independent study      104 h
			Total: 180 h
13	Lecturer	Prof. Dr.-Ing. Sven Braemer	
14	Language of instruction	English	
15	Content	The roles of enterprises and Authorities in society, legal frame, service offer and service provision, product lifecycle management, mission, vision, strategy, tactics, operations, controlling, quality management, risk management, certification, verification, validation, accreditation, liability, information security, human resources management, int. management, reaction patterns to severe incidents	
16	Learning target	The course prepares participants for future leadership positions in enterprises or Authorities. Students are exposed to the typical complex decision making process on executive levels. In-depth group based project work stimulates initiative and teamwork. Instead of teaching preconceived standard solutions, opportunities to study and discuss recent scientific management methods are given. Students are able: - to develop options for strategic and operative decisions regarding company and Authority policy. -to perform critical risc assessments and propose mitigation options -react to severe incidents and incomplete information within the available scope for decisions	

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|----|---------------------|---|
| 17 | Remarks             | lecture with beamer and blackboard, exercises on specific examples, self study, elaborate and present the own project.  |
| 18 | Relevant literature | Directives of the European Union, acc. to topic<br>ISO9001, various Certification standards, latest issue<br>General Data Protection Regulation EU, latest issue<br>ISO31000 risk management, latest issue<br>Additional literature is announced in the lecture (recent whitepapers etc.) |
| 19 | Further Information | -   |

1	<b>GGI.19.008</b>	<b>Spatial Data Infrastructure</b>	
2	German module name	Version: 16.11.2018 Geodateninfrastruktur	
3	Person responsible	Prof. Dr.-Ing. Wolfgang Kresse	
4	Credits	6	
5	Course	LGM Landscape Architecture and Greenspace Management Elective module in first semester (4-semester course, path B)	Version 2019
		GGI Geodesy and Geoinformatics Elective module in first / second semester	Version 2013
6	Frequency / duration	Begins every summer semester / one semester	
7	Prerequisites	None	
8	<b>Results required to attain credits</b>		
9	Grades and weighting	This module is graded. The module grade is weighted in the overall course grade as described in the examination table.	
10	Type of assessment	M Oral exam (30 minutes duration)	
11	Requirements	Prerequisite: accepted research paper	
12	<b>Type of instruction and workload</b>		
	I LGM.19.008.10	Spatial Data Infrastructure Seminar, 2 SWH	32 h
	II LGM.19.008.20	Spatial Data Infrastructure Exercise, 2 SWH	32 h
	III	Independent study	86 h
			Total: 150 h
13	Lecturer	Prof. Dr.-Ing. Wolfgang Kresse	
14	Language of instruction	English	
15	Content	Structure of an SDI, standards, networks, responsibilities, access rights Development of a small system, study of sources, data capture of geometry and alphanumeric data, implementation of a geo-portal, programming of a database-access via a network	
16	Learning target	The students learn the concept of spatial data infrastructures (SDI) and its implementation on European, national, provincial and municipal level. The students know the relevant standards and their implementation. The students become familiar with the SDIs in Mecklenburg-Vorpommern – as an example – and with the presently most important software solutions. The students are able to design, implement and administrate a spatial data portal, in particular the link to other sources of spatial data, the programming of query-functions, and the assignment of user-roles.	
17	Remarks	Lectures involve the use of current didactic aids including the internet Practical exercises require the use of computers and involve compiling different sources of data.	
18	Relevant literature	- Kresse, Wolfgang, Danko, David: <i>Handbook of Geographic Information</i> , Heidelberg, 2012, Springer.  - Mitchell, Tyler, Emde, Astrid, Christl, Arnulf: <i>Web-Mapping mit Open Source-GIS-Tools</i> , Sebastopol (CA, USA), 2008, O'Reilly.	

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

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

<sup>19</sup> Further information

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1	<b>GGI.19.017</b>	<b>GI-Technologies</b>	
2	German module name	Version: 16.11.2018 GI-Technologien	
3	Person responsible	Prof. Dr.-Ing. Ralf Löwner	
4	Credits	6	
5	Course	LGM Landscape Architecture and Greenspace Management Version 2019 Elective module in first semester (2-semester course, path A) Elective module in first / second semester (4-semester course, path B)	
		GGI Geodesy and Geoinformatics Version 2013 Elective module in first / second semester.	
6	Frequency / duration	Begins every winter semester (and summer semester if required) / one semester	
7	Prerequisites	None	
8	<b>Results required to attain credits</b>		
9	Grades and weighting	This module is graded. The module grade is weighted in the overall course grade as described in the examination table.	
10	Type of assessment	AHA Projectwork with presentation (weighting = 50%) M Oral exam (30 minutes duration, weighting = 50%)	
11	Requirements	None	
12	<b>Type of instruction and workload</b>		
	I	GGI.19.017.10	GI-Technologies Lectures, 1,25 SWH 20 h
	II	GGI.19.017.20	GI-Technologies Exercises, 2,25 SWH 36 h
	III		Projectwork 20 h
	IV		Independent study 104 h
			Gesamt: 180 h
13	Lecturer	Prof. Dr.-Ing. Ralf Löwner	
14	Language of instruction	English	
15	Content	The module is praxis related and the students work out their own projects under several topics; this includes an overview about the actual trends and developments in Geoinformatik (Mobile GIS, WebGIS, Free & Open Source Software, Open Data, OpenGIS); application of technologies for different land management systems; the exercises comprise projects from land- and risk management, agriculture, urban development, GIS for developing countries (digital divide), health management, tourism, resources and geology, archeology and research of ancient patterns;	
16	Learning target	The students learn about actual developments in GI technologies and apply several methods during practical projects.	
17	Remarks	Lectures are used to introduce and explain the theoretical content which is then realized in the form of practical exercises; The e-learning-platform of the university is available for the distribution of additional information to the students and for the evaluation of the students' works; Exercises are carried out in computer labs.	
18	Relevant literature	- Bill, R.: <i>Grundlagen der Geo-Informationssysteme</i> . Wichmann Verlag, 5. Auflage 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*. Lehmanns Media Verlag, 3. Auflage, 2010;

Current editions of the relevant literature and current topics.

<sup>19</sup> Further Information

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