TECHNISCHE HOCHSCHULE
OSTWESTFALEN-LIPPE
UNIVERSITY OF
APPLIED SCIENCES
AND ARTS

Technische Hochschule Ostwestfalen-Lippe

Fachbereich 9 / DEPT 9

Landschaftsarchitektur und Umweltplanung /
Landscape Architecture and Environmental Planning

Modulhandbuch / Module Manual

zum / for

Master-Studiengang / Master Program

Sustainable Landscape Design and Development

Master of Arts (M.A.)

Inhaltsverzeichnis

Einführung und Lesehilfe

Das Modulhandbuch

Das Modulhandbuch stellt alle studierbaren Module des Studiengangs Sustainable Landscape Design and Development vor, benennt Lernziele und Lehrinhalte sowie die vorgesehene Prüfungsform.

Das Modulhandbuch ergänzt die spezielle Prüfungsordnung, die zu den jeweiligen Bereichen Näheres regelt und im Internet im Bereich „Verkündungsblätter“ abrufbar ist.

Das Modulhandbuch wird durch den Fachbereich 9 – Landschaftsarchitektur und Umweltplanung – jährlich überprüft und ggf. überarbeitet, angepasst und fortgeschrieben.

Die Prüfungen

Die Prüfungsformen der Module werden zu Beginn jeden Semesters durch die Lehrenden schriftlich wie mündlich bekanntgegeben. Die Prüfungszeiträume bestimmt der Prüfungsausschuss.

Die Verwendbarkeit bestandener Module beschränkt sich ausschließlich auf den Studiengang Master in *Sustainable Landscape Design and Development*.

Der Aufbau des Modulhandbuches

Die einzelnen Module sind in der Modulbeschreibung inhaltlich näher erläutert. Ebenso wird die Lehrform genannt und die zu erwerbenden Credits sowie die Prüfungsform angegeben. In einer abschließenden Tabelle wird ein Gesamtüberblick über den Studienverlauf dargestellt.

Nähere Erläuterungen werden durch die Lehrenden jeweils zu Beginn des Semesters gegeben.

Aktuelle Versionen der Modulbeschreibungen sind auch im CampusManagement über die Homepage der Technischen Hochschule Ostwestfalen-Lippe abzurufen, über das auch die Stunden und Raumplanung erfolgt. Die Studierenden besitzen zudem einen persönlichen Zugang über CampusOffice.

Die Anmeldung zu Pflichtfächern

Die Anmeldung kann online erfolgen. Für einige Fächer sind weiterhin Anmeldungen per Liste im Dekanat erforderlich (beispielsweise, wenn nur eine begrenzte Zahl an Rechner- oder Laborplätzen vorhanden ist). Die Regelgröße für Gruppen beträgt 20 Studierende.

Introduction

Module Manual

The Module Manual presents all modules of the Master Program Sustainable Landscape Design and Development, and describes their learning objectives and content, as well as the intended type of examination.

The Module Manual supplements the „spezifische Masterprüfungs-ordnung“ (“Specific Master’s Examination Regulations”), which describe the detailed regulations of the program. These can be found online in the “Verkündungsblätter” (“Announcement pages”) section.

The Module Manual is being evaluated annually and adjusted if need be.

Examinations

The type of examination for each module is communicated by the lecturers both in writing and orally at the beginning of each semester. The Examination Board determines the examination periods.

Modules that have been successfully passed are only creditable for the Master Program *Sustainable Landscape Design and Development*.

Structure of the Module Manual

The content of each module is described in detail in the Module Manual, which also lists the teaching methods, the credits available and the type of examination. A final table provides an overview of the study program.

The lecturers give further information on their modules at the beginning of each semester.

Current versions of the Module Manual can be found online in the CampusManagement section of the Homepage of the TH OWL. Information on schedules regarding timetables and classrooms are listed in this section as well. All students have personal access to CampusOffice.

Registration for compulsory modules

Registration can be processed online. However, for some modules, it may be necessary to register personally per list at the Dean's Office (for example, if there is only a limited number of computer terminals or laboratory spaces). The standard size for groups is 20 students.

Qualifikationsziele

Master in Sustainable Landscape Design and Development

Die Aufgabe der nachhaltigen Gestaltung und Entwicklung von urbanen Freiräumen und Landschaften gewinnt international zunehmend an Bedeutung und das Interesse dafür wächst. Gleichzeitig gibt es im Ausland nicht überall die Möglichkeit, entsprechende akademische Fachkenntnisse zu erwerben oder Landschaftsarchitektur zu studieren. Diese internationale Zielgruppe von potentiellen Studierenden will der Fachbereich Landschaftsarchitektur und Umweltplanung ansprechen, um sie mit Hinblick auf die global anstehenden Herausforderungen im Bereich der Urbanisierung und des Umweltschutzes zu qualifizieren.

Der zweijährige englischsprachige Masterstudiengang richtet sich an hochqualifizierte internationale Bewerber mit einem 3-jährigen Bachelor-Abschluss in den Bereichen Landschaftsarchitektur und -planung sowie verwandten Fächern wie Architektur, Städtebau, Stadtplanung und Umweltplanung.

Der internationale Studiengang *Sustainable Landscape Design and Development* beabsichtigt Studierenden mit Studienabschlüssen aus verschiedenen planerischen Bereichen, die neben der Landschaftsarchitektur aus der Architektur, der Stadtplanung oder der Umweltplanung kommen können, mit den „grünen" Themen der Landschaftsarchitektur zu konfrontieren, um zu einer neuen Qualifikation auf Masterniveau zu führen. Der internationale Studiengang zielt darauf hin, von der Zusammenführung der verschiedenen planerischen und kulturellen Zugänge der Studierenden zu

profitieren und damit zu einem neuen, vertiefenden und gleichzeitig eigenständigen transdisziplinären planerischen Zugang zu Zukunftsfragen zu führen.

Das Programm verbindet die lange deutsche Tradition der integrativen Betrachtung der Freiraumplanung und Landschaftsplanung mit zukunftsweisenden, innovativen Ansätzen der Gestaltung und Entwicklung urbaner und ländlicher Räume. Die Studierenden werden dabei qualifiziert systemisch zu denken und zu handeln und die verschiedenen Dimensionen der Gestaltung und Entwicklung von Freiraum und Landschaft vernetzt im großen und langfristigen Kontext zu betrachten. Das Masterprogramm konzentriert sich auf die Herausforderungen des 21. Jahrhunderts - wie Klimawandel und wassersensible Stadtentwicklung, Biodiversität, Gender Equal City, Energielandschaft, Healthy Cities, Ernährungssicherheit, urbane Schrumpfungsprozesse sowie zunehmende Urbanisierung und Migration. Die Nachhaltigkeitsziele der Vereinten Nationen (United Nations Sustainable Development Goals) und deren Prinzipien bieten dafür den Referenzrahmen.

Der Studiengang mit seiner ganzheitlichen Sicht auf das breite Spektrum von Aspekten der nachhaltigen Gestaltung und Entwicklung von Freiräumen und Landschaften orientiert sich an den Erfordernissen des Arbeitsmarktes, verweist aber auch auf sich neu etablierende Berufsfelder. Im Zentrum der zu vermittelnden Fähigkeiten, Kenntnissen und Kompetenzen stehen folgende Kernbereiche, wobei Nachhaltigkeitskriterien hier ausschlaggebend sind:

- städtische Freiraumentwicklung und der Entwurf von Freiräumen,
- Landschaftsplanung, Ökologie, Umweltvorsorge und Umweltbildung,
- Konstruieren von baulichen Elementen, Detailplanung und Materialwahl in Außenanlagen,
- Kompetenz zur nachhaltigen Gestaltung ökologischer und ökonomischer Pflanzungen,
- Steuerung und Moderation komplexer Planungsprozesse,
- wissenschaftliche und theoretische Herleitung und Begründung von Planungsentscheidungen sowie deren Realisierung.

Die Studierenden setzen sich somit mit dem breiten Spektrum der Aspekte der nachhaltigen Gestaltung und Entwicklung von urbanen Freiräumen und Landschaften auf Masterniveau

auseinander, erwerben relevantes typologisches Wissen, entwickeln ein kritisches Methodenverständnis und bauen ihre Erfahrungen in fachspezifischen Techniken und Werkzeugen weiter aus. Dies soll ihnen ermöglichen, sich in verschiedene internationale Kontexte hineinzudenken und zu intervenieren und innovative Gestaltungs- und Planungslösungen in allen Maßstäben zu entwickeln, von städtischen Freiräumen bis zu Stadtsystemen, größeren

Der primär anwendungsorientierte Studiengang *Sustainable Landscape Design and Development* bereitet die Absolventinnen und Absolventen darauf vor, in umwelt- und planungsorientierten Forschungsfeldern wissenschaftlich zu arbeiten oder auf der Ebene von Management-, Führungs- oder Leitungspositionen im Arbeitsfeld der nachhaltigen Gestaltung und Entwicklung von Landschaften im In- und Ausland tätig zu sein. Außerdem erlangen die Absolventinnen und Absolventen durch das erfolgreiche Ablegen der Masterprüfung die Befähigung zur wissenschaftlichen Weiterentwicklung (Promotion).

Durch die Kombination aus theoretischem Wissen und praktischer Umsetzung in den Projekt-Modulen sowie dem einsemestrigen Praktikum und der Masterthesis, werden die Fähigkeiten der Studierenden fachübergreifend zu denken und zu arbeiten sowie ihre Anwendungs- und Entscheidungskompetenzen für die große Spannbreite der Aspekte nachhaltiger Gestaltung und Entwicklung von Landschaften weiterentwickelt. Zudem erwerben die Studierenden fachliche, soziale und systematische Kompetenzen, um das jeweilige Arbeitsfeld mit seinen gesellschaftlichen, ökologischen und ökonomischen Folgen kritisch zu beleuchten und gut informiert Entscheidungen treffen zu können. Ziel ist nicht nur exemplarisch das spezifisch Deutsche zu vermitteln, sondern diesem kontextuell die verschiedenen internationalen Perspektiven und Fragestellungen gegenüber zu stellen und somit die Sensibilität der Studierenden für die Kontextualität jeglicher Planung zu fördern.

Dabei ist der Studienverlaufsplan auf die Bedürfnisse internationaler Studierender abgestimmt, in dem es:

- ein intensives Präsenzjahr in Höxter gibt, das durch Lehrveranstaltungen außerhalb der Hochschule („Extra Muros“) ergänzt wird, die einen exemplarischen und gleichzeitig praxisnahen Zugang zu Planungsaufgaben, -beispielen sowie -büros und -institutionen ermöglichen sollen und

- die Möglichkeit einräumt, sowohl das Praktikum als auch die Thesis ohne Präsenzpflicht in Höxter zu absolvieren, und entweder Praktikum oder Thesis im Ausland, z.B. wieder im Heimatland, durchzuführen.

Durch die selbstständige Wahl der Praxissemesterstelle, die Auswahl der Wahlpflichtfächer im zweiten Semester und des Themas der Masterthesis können die Studierenden ihrem Abschluss eine dem eigenen angestrebten Berufsziel entsprechende Akzentuierung verleihen.

Der unten abgebildete Studienverlaufsplan führt die für den Master in *Sustainable Landscape Design and Development* vorgesehenen Module auf. Eine detaillierte Beschreibung aller Module und deren Inhalte befindet sich innerhalb des Modulhandbuches.

Semester	Lehrinhalte										Gesamtcredits
4. Semester SoSe									9840 - Thesis-Kolloquium		30 Credits
3. Semester WiSe	9830 - Praxissemester / Internship										30 Credits
2. Semester SoSe	9821 - Infrastructural Landscapes *	9822 - Planning Ahead: Development through Maintenance *	9823 - Participatory Landscape Development and Design *	9824 - Sustainable Landscape Architecture *	9825 - International Urban Landscapes *	9826 - User-oriented Open Space Development *	16061 - Digital tools in sustainable landscape architecture and public spatial planning *	XXXX - Innovative Planting Design for Sustainable Cities *	9828 - Extra Muros 2	9829 - Landscape Planning and Development Project	30 Credits
1. Semester WiSe	9811 - Human-centered Open Space Planning and Design	9812 - Sustainable Planting Design	9813 - Landscape and Regional Planning in Germany	9814 - Quality in Detailed Design					9818 - Extra Muros 1	9819 - Urban Landscape Project	30 Credits

Master-Thesis	27 CR
Kollquium	3 CR
Internship	30 CR
Projekt	6 CR
Extra Muros	4 CR
Pflichtmodul	5 CR
Wahlpflichtmodul*	5 CR

* = 4 von 6 Wahlpflichtfächern müssen gewählt und bestanden werden.

Der Studienverlauf des Master-Studiengangs *Sustainable Landscape Design and Development* gliedert sich wie folgt:

Die ersten beiden Semester setzten sich aus Pflichtmodulen (1. Semester) und Wahlpflichtmodulen (2. Semester) zusammen. In beiden Semestern gibt es darüber hinaus jeweils ein Projekt (Urban Landscape Project im 1. Semester; Landscape Planning and Development Project im 2. Semester). Ergänzend zu den überwiegend am Campus gelehrten Projekten und (Wahl-) Pflichtfächern, erleben die Studierenden bei den Exkursionen der Module „Extra Muros 1“ und „Extra Muros 2“ relevante Projekte vor Ort und haben zudem die Möglichkeit zum Austausch mit Externen.

Im 3. Semester absolvieren die Studierenden ein Praxissemester an einer Institution (z.B. Planungsbüro, Behörde, Landschaftsverband, etc.) ihrer Wahl. Der Ort des Praktikums ist frei wählbar, er kann sowohl in Deutschland als auch im Ausland liegen.

Im 4. Semester verfassen die Studierenden ihre Masterthesis und werden – sofern der schriftliche Teil sie für die Masterzulassung qualifiziert – in einem Kolloquium geprüft. Die Studierenden und ihre betreuenden Professorinnen und Professoren tauschen sich nach Absprache bei regelmäßigen Betreuungsterminen (persönliche Treffen oder im digitalen Austausch) über den Fortschritt der Thesis-Bearbeitung aus. Eine allgemeine Anwesenheitspflicht besteht für die Studierenden während des 4. Semesters nicht.

Der Master in *Sustainable Landscape Design and Development* umfasst den Erwerb von insgesamt 120 Credits. Grundsätzlich wird jedem Credit ein Workload von 30 Arbeitsstunden zugeordnet. Insgesamt ergibt sich für das Absolvieren des Studiengangs ein Arbeitsaufwand von 120 Credits x 30h = 3.600 Arbeitsstunden, einschließlich des Praktikums, der Masterarbeit und des zugehörigen Kolloquiums. Die detaillierte Vergabe der Credits, verteilt auf die einzelnen Module, die zeitliche

Einteilung und der zeitliche Umfang eines jeden Moduls sowie die Prüfungsformen werden im Modulhandbuch des *Sustainable Landscape Design and Development* dokumentiert.

Qualification Goals

Master in Sustainable Landscape Design and Development

The role of sustainable design and development of urban open spaces and landscapes is becoming increasingly important internationally and demand for such a program is growing. At the same time, it is not possible to obtain the appropriate academic professional knowledge or study Landscape Architecture at this level in all countries.
The Department of Landscape Architecture and Environmental Planning is targeting this international group of potential students, to give them the qualifications to address the global challenges we are facing in the context of urbanization and environmental protection today.

The two-year English-language master's course has been designed to attract highly qualified international applicants having as minimum a three-year bachelor's degree in Landscape Architecture and Planning as well as other related subjects such as Architecture, Urban Design and Planning, and Environmental Planning. The international program in Sustainable Landscape Design and Development is for postgraduate students with a bachelor's degree in Landscape Architecture or related fields of planning such as Architecture, Urban Design and Planning and Environmental Planning, and aims to challenge them with the "green" aspects of Landscape Architecture, which will lead to a new master's level qualification and expertise. This international program benefits from the students' different planning and cultural approaches, and leads to a new, in-depth and, at the same time, independent transdisciplinary planning approach relevant to future challenges.

The program combines the long German tradition of integrative consideration of open space and landscape planning with innovative design and development approaches for urban and rural areas. The students become qualified to think and act systemically and to consider the different dimensions of the design and development of open space and landscape in the long-term framework of their interdependencies. The master's program focuses on the challenges of the 21st century, such as climate change, water-sensitive urban development, biodiversity, gender equal cities, energy landscapes, healthy cities, food security, urban shrinkage processes and increasing urbanization and migration. The United Nations Sustainable Development Goals and their principles provide the framework for the content of this master's program.

The study program with its holistic view of a broad spectrum of aspects of sustainable design and development of open spaces and landscapes refers to the requirements of the existing job market, but also addresses new emerging professional fields. The focus of skills, knowledge and competences provided by the program lies in the following core areas, with sustainability criteria being decisive in all fields:

- urban open space development and the design of open spaces,

- landscape planning, ecology, environmental precaution and environmental education,

- construction of structural elements, detailed planning and choice of materials in outdoor facilities,

- competence in the sustainable design of ecological and economic plantings,

- managing and moderation of complex planning processes,

- scientific and theoretical derivation and reasons for planning decisions and their implementation.

Thus, the students discuss and reflect at a master's level on a broad spectrum of aspects of sustainable design and development of urban open spaces and landscapes, acquire relevant typological knowledge, develop a critical understanding of methods and further expand their experience in subject-specific techniques and tools. These skills allow them to think themselves into and intervene in various international contexts and to develop innovative design and planning solutions on all scales, from urban open spaces to urban systems, larger landscapes and territories.

The primarily application-oriented program in Sustainable Landscape Design and Development prepares graduates to work scientifically in environmental and planning-oriented research fields or in leadership and management positions in the field of sustainable design and development of landscapes in Germany and abroad. Furthermore, by successfully completing the master's degree, graduates acquire the required qualification for further scientific and academic development (doctorate).

Through the combination of theoretical knowledge and practical implementation in the project modules, as well as during the internship semester and the final thesis, the students further develop their abilities for interdisciplinary thinking and working as well as their decision-making skills for the wide range of aspects within sustainable landscape design and development. In addition, the students acquire professional, social and systematic skills in order to critically examine the respective field of work with its social, ecological and economic consequences in order to make informed decisions. The goal is not only to convey the “typical German” aspects, but also to contextually juxtapose these with the various international perspectives and challenges in order to promote the students' sensitivity to the contextuality of any planning.

The study program is tailored to meet the needs of international students, with:

- one year’s intense attendance in Höxter (on campus), supplemented by courses outside the university ("Extra Muros"), which provide exemplary and practical experience of planning challenges, planning examples, offices and institutions, and

- the opportunity to complete both the internship and the thesis without being present on campus in Höxter, and to complete either the internship or the master thesis abroad, e.g. in their home country.

Due to the individual choice of the internship semester position, and the choice of elective modules in the second semester, as well as the topic of the master thesis, the students can accentuate their degree corresponding to their desired professional goals.

The study plan below shows the modules of the Master in Sustainable Landscape Design and Development. A detailed description of all modules and their content can be found in the Module Manual.

Semester	Modules										Total of Credits
4. Semester (Summer)	9840 - Master-Thesis								9840 - Thesis-Colloquium / Oral Examination		30 Credits
3. Semester (Winter)	9830 - Internship										30 Credits
2. Semester (Summer)	9821 - Infrastructural Landscapes *	9822 - Planning Ahead: Development through Maintenance *	9823 - Participatory Landscape Development and Design *	9824 - Sustainable Landscape Architecture *	9825 - International Urban Landscapes *	9826 - User-oriented Open Space Development *	16061 - Digital tools in sustainable landscape architecture and public spatial planning *	XXXX - Innovative Planting Design for Sustainable Cities *	9828 - Extra Muros 2	9829 - Landscape Planning and Development Project	30 Credits
1. Semester (Winter)	9811 - Human-centered Open Space Planning and Design	9812 - Sustainable Planting Design	9813 - Landscape and Regional Planning in Germany	9814 - Quality in Detailed Design					9818 - Extra Muros 1	9819 - Urban Landscape Project	30 Credits

Master-Thesis	27 CR
Thesis-Collquium / Oral Examination	3 CR
Internship	30 CR
Project	6 CR
Extra Muros	4 CR
Compulsory Module	5 CR
Elective Module*	5 CR

* = Students have to select and pass 4 out of 6 Elective Modules.

The Master's program in Sustainable Landscape Design and Development is composed as follows:

The first two semesters consist of compulsory modules (1st semester) and elective modules (2nd semester). Both semesters also include a project module (Urban Landscape Project in the 1st semester; Landscape Planning and Development Project in the 2nd semester). In addition to the modules taught on campus, such as the projects and the compulsory and elective courses, the excursion modules “Extra Muros 1” and “Extra Muros 2” give students the opportunity to experience relevant projects on site and to exchange ideas with external parties.

In the 3rd semester, students undertake an internship at an institution (e.g. planning office, authority, landscape association, etc.) of their choice. The location of the internship can be freely selected either in Germany or abroad.

In the 4th semester, the students write their Master Thesis and, if the written part qualifies them for admission to the master's exam, are examined in a colloquium (oral examination). Students and their supervising professors discuss the progress of the thesis at regular supervisory appointments (personal meetings or in digital exchange). There is no general attendance requirement for students during the 4th semester.

The Master in Sustainable Landscape Design and Development requires the acquisition of a total of 120 credits. In general, each credit is assigned a workload of 30 working hours. In total, it takes 120 credits x 30 hours = 3,600 hours to complete the course, including the internship, the Master Thesis and the associated colloquium (oral examination). The detailed allocation of the credits for each module, the required time input and the type of examination for all modules are documented in the Module Manual of the master's program Sustainable Landscape Design and Development.

Prüfungsformen

Prüfungsform	*Prüfungsdauer*
Klausurarbeit (§8) Sonderform: E-Klausur	Bearbeitungszeit für die Klausurarbeit: 1 – 2 Stunden, ausnahmsweise bis zu 3 Stunden Bearbeitungszeit für die E-Klausur: 1 – 2 Stunden, ausnahmsweise bis zu 3 Stunden
Prüfung im Antwort-Wahl-Verfahren (§9) Sonderform: E-Multiple Choice	Bearbeitungszeit für die Prüfung im Antwort-Wahl-Verfahren: 1 – 2 Stunden, ausnahmsweise bis zu 3 Stunden Bearbeitungszeit für die Prüfung im E-Multiple Choice: 1 – 2 Stunden, ausnahmsweise bis zu 3 Stunden
Bildschirmarbeit (§10)	Bearbeitungszeit für die Bildschirmarbeit: 1 – 2 Stunden, ausnahmsweise bis zu 3 Stunden
Mündliche Prüfung (§11)	Dauer der mündlichen Prüfung: 20 – 30 Minuten je Prüfling
Präsentation (§12)	Bearbeitungsfrist für die Aufgabenstellung: mindestens 4 Wochen, Dauer der Präsentation: 20 – 30 Minuten je Prüfling
Präsentation mit Kolloquium (§13)	Bearbeitungsfrist für die Aufgabenstellung: mindestens 4 Wochen, Dauer der Präsentation: 20 – 30 Minuten je Prüfling Dauer des Kolloquiums: 10 – 20 Minuten je

	Prüfling
Ausarbeitung (§14)	Bearbeitungsfrist für die Ausarbeitung: mindestens 4 Wochen
Ausarbeitung mit Kolloquium (§15)	Bearbeitungsfrist für die Ausarbeitung: mindestens 4 Wochen, Dauer des Kolloquiums: 10 – 15 Minuten je Prüfling
Ausarbeitung mit Präsentation und Kolloquium (§16)	Bearbeitungsfrist für die Ausarbeitung: mindestens 4 Wochen, Dauer der Präsentation und Kolloquium: insgesamt 30– 40 Minuten je Prüfling; die zeitlichen Anteile von Präsentation bzw. Kolloquium legt der Prüfungsausschuss fest
Projekt (§17)	Bearbeitungsfrist für die Aufgabenstellung und das Arbeitsergebnis: mindestens 3 Monate, Dauer der Präsentation: 15 – 20 Minuten je Prüfling

Die jeweilige Prüfungsform ist für die zu belegenden Module definiert und der vorstehenden Tabelle zu entnehmen. Zu Beginn jeden Semesters werden die speziellen Prüfungsanforderungen für die Module durch die Lehrenden bekannt gegeben und insbesondere für die Prüfungsformen Ausarbeitung, Ausarbeitung mit Kolloquium und Ausarbeitung mit Präsentation und Kolloquium sowie Projekt wird der genaue Umfang der zu erbringenden Prüfungsleistung definiert und ist für die Studierenden und Lehrenden gleichermaßen verbindlich.

Types of Examination

Types of Examination	*Duration of Examination*
written exam (§8) special form: electronically aided written exam	duration of exam: 1 – 2 hours, exceptionally up to 3 hours, duration of electronically aided written exam: 1 – 2 hours, exceptionally up to 3 hours
multiple choice test (§9) special form: electronically aided multiple choice test	duration of multiple choice test: 1 – 2 hours, exceptionally up to 3 hours, duration of electronically aided multiple choice test: 1 – 2 hours, exceptionally up to 3 hours
exam at computer monitor / VDU (Visual Digital Unit) (§10)	duration of exam at computer monitor / VDU: 1 – 2 hours, exceptionally up to 3 hours
oral examination (§11)	duration of oral examination: 20 – 30 Minutes per student
presentation (§12)	processing time for the presentation's assignment: min. 4 weeks, duration of presentation: 20 – 30 Minutes per student
presentation with colloquium (oral examination) (§13)	processing time for the assignment for the presentation and colloquium: min. 4 weeks, duration of presentation: 20 – 30 Minutes per student duration of colloquium: 10 – 20 Minutes per student
assignment (§14)	processing time for assignment: min. 4 weeks,
assignment with colloquium (oral examination) (§15)	processing time for assignment: min. 4 weeks, duration of colloquium: 10 – 15 Minutes per student

assignment with presentation and colloquium (§16)	preparation time for assignment: min. 4 weeks, duration of presentation and colloquium: total of 30– 40 Minutes per student; (the time frame for the presentation and the colloquium is determent by the examination board)
project (§17)	processing time for project assignment: min. 3 months, duration of presentation: 15 – 20 Minutes per student

The type of assessment for each module is listed and defined in the table above.

At the beginning of each semester, the lecturers will communicate the type of assessment for each module. In particular, assignments, assignments with colloquium (oral examination), assignments with presentation and colloquium, and projects will be defined within the exact scope of the examination to be taken which is binding for both students and lecturers.

Sustainable Landscape Design and Development

Title of Course **Human-centered Open Space Planning and Design**					
Code	**Workload**	**Credits**	**Semester**	**Frequency**	**Duration**
9811	150 h	5 (ECTS)	1st Semester	Every winter semester	One semester

1	**1.1 Teaching activities**	**1.2 Time**	**1.3 Self-Study**	**1.4 Group Size**
	a) Lectures	2 SWS	90 h	20 Students
	b) Seminar	2 SWS		

2	**Course objectives (competences)** The course deals with the principles and methods of urban landscape design and planning of public open spaces as well as of open spaces in residential environments, and focusses on a human-centered design approach that takes into consideration the needs of the different users of open spaces. The module discusses experiences with the practice of different open space concepts in the context of sustainable urban development in Germany and Europe, embedding them in the legal framework. The students deepen their understanding of the goals and tasks of sustainable urban landscape design and development. In addition, they expand their knowledge of the broad spectrum of methods used in urban landscape design and development. They reflect on the importance of open spaces as elementary components serving general interests and are able to evaluate them against the background of urban economic contexts. Open space design and planning is addressed as a central cross-sectional task of integrated sustainable urban development as represented in the highly developed legal frameworks of Germany and Europe. Upon completion of the course, the students are able to: • critically understand the methods and concepts of urban landscape design and development, • apply relevant research methods and analyses of open space design and development, • integrate sustainability and human-centered design criteria into the design of urban and peripheral areas, • design open spaces of various sizes, taking into account esthetic, ecological and functional requirements.

3	**Course Content** Human-centered design: • Human-centered Design as a relevant approach for urban and open space design and development, • needs and requirements of the urban population concerning urban landscapes and open spaces, Legal framework of urban landscape development: • development of a critical understanding of the principles of the legal framework for urban development in Germany and Europe, • important planning regulations for urban landscapes. Formal and informal planning processes: • application of formal planning procedures (land use plan, development plan, landscape plan, open space plan, etc.), • application of informal planning processes (open space plan, integrated urban development concept etc.), • open space design methods and practices that combine esthetic, ecological and functional requirements.
4	**Learning Methods** Students work individually and in group settings. The teaching approach consists of both lectures and a seminar in a studio format.
5	**Participation Requirements** Understanding of social processes and sociological contexts. Understanding of urban economic contexts. Experience in working and planning on different scales.
6	**Types of Examination and Grading** Type of examination: assignment (§14) The module is assessed on course work (100%). Grades respond to the German grading system: 1,0 = best grade; 4,0 = minimum to pass Grading scheme: 1,0 - 1,3 - 1,7 - 2,0 - 2,3 - 2,7 - 3,0 - 3,2 - 3,7 - 4,0. Students with any score above 4,0 fail the course. Weighting of this course for final grade: 5/82
7	**Conditions for Signature** Fulfillment of activities from section 1.1 – 1.3. Passing semester assignments.
8	**Language** English

9	**Methods of Monitoring the Quality of Teaching** Internal evaluations and surveys.
10	**Lecturer/s** Prof. Dr. Stefan Bochnig, Prof. Dr. Hans-Peter Rohler
11	**Further Information** As the focus of the module will vary, a dedicated reading list will be specified each semester.

Sustainable Landscape Design and Development

Title of Course **Sustainable Planting Design**					
Code	**Workload**	**Credits**	**Semester**	**Frequency**	**Duration**
9812	150 h	5 (ECTS)	1st Semester	Every winter semester	One semester

1	**1.1 Teaching activities**	**1.2 Time**	**1.3 Self-Study**	**1.4 Group Size**
	a) Lectures	1 SWS	90 h	20 Students
	b) Seminars / Tutorials	2 SWS		
	c) Excursions	1 SWS		

2	**Course Objectives (Competences)** Students develop a critical understanding of a wide range of planting schemes and gain insight into the combination of plants regarding their form, color and texture. They discuss and extend their existing knowledge of the rhythm and structure of plantings and how these might refer to the given site conditions and enhance the sense of space. The role of natural plant communities as models for sustainable plant combinations is discussed, particularly with regard to maintenance and cost efficiency. Upon completion of the course students will be able to: • discuss the diversity of historical approaches to planting design in their cultural and socio-political setting as well as their conceptual and methodical background, • recognize the influence of these traditions on current planting design, • differentiate between different styles of planting design, • identify ways in which planting design may respond to site specifics and user needs, particularly in urban and peri-urban areas. In doing so, students will deepen their: • comprehension of site conditions as the basic criterion of plant selection, • understanding of natural habitats as exemplary for built planting environments, • knowledge of a range of plants and their esthetic qualities as well as their site requirements, • competences in formulating individual design strategies in answer to specific sites.

3	**Course Content** This module comprehensively summarizes knowledge in planting design as a discipline between ecology and esthetics, enhancing and leveling the students' previous knowledge. Throughout modernity, concepts of planting design as well as requirements for designing with plants and availability of plant material have changed considerably. Focusing on Germany and Europe the course covers important historical changes in the conceptualization of planting schemes and their influence on contemporary plantings. Study trips as well as the university's own botanic garden allow students to gain hands-on experience of successful planting concepts, be they historic or contemporary. Planting design history throughout modernity: • natural and architectonical styles of planting design, • functionalism in landscape architecture planting, • changes and constants in approaches to planting, • developments in ecology and plant sociology and their relevance for sustainable planting schemes. Current approaches to planting design: • planting schemes in current projects, • planting design – who's who, • analysis of exemplary planting schemes. Needs and esthetics of plants / plant knowledge: • knowledge of a range of plants (trees/shrubs, perennials; hardy and non-hardy, etc.), • critical understanding of growth, structure and texture, • designing planting combinations by growth habits, site requirements and design aspects.
4	**Learning Methods** Within the seminar and the tutorials the students are required to work individually and in group settings. They practice presentation and drawing skills as well as working with different historical sources and materials. They engage in the use of nursery catalogues and other media of plant selection. Lectures, seminars and tutorials, and excursions.
5	**Participation Requirements** Apart from an interest in plants and planting design, no participation requirements have to be met. Any previous knowledge will be appreciated but is not a prerequisite.

6	**Types of Examination and Grading** Type of examination: assignment (§14) The module is assessed on course work (100%). Grades respond to the German grading system: 1,0 = best grade; 4,0 = minimum to pass Grading scheme: 1,0 - 1,3 - 1,7 - 2,0 - 2,3 - 2,7 - 3,0 - 3,2 - 3,7 - 4,0. Students with any score above 4,0 fail the course. Weighting of this course for final grade: 5/82
7	**Conditions for Signature** Fulfillment of activities from section 1.1 – 1.3. Passing semester assignments.
8	**Language** English
9	**Methods of Monitoring the Quality of Teaching** Internal evaluations and surveys.
10	**Lecturer/s** Prof. Dipl.-Ing Cassian Schmidt / M.Sc. Jessica Gabler
11	**Further Information** As the focus of the module will vary, a dedicated reading list will be specified each semester.

Sustainable Landscape Design and Development

Title of Course **Landscape and Regional Planning in Germany**					
Code 9813	**Workload** 150 h	**Credits** 5 (ECTS)	**Semester** 1st Semester	**Frequency** Every winter semester	**Duration** One semester

1	**1.1 Teaching Activities**	**1.2 Time**	**1.3 Self-Study**	**1.4 Group Size**
	a) Lectures	2 SWS	90 h	20 Students
	b) Seminar / Excursions	2 SWS		

2	**Course Objectives (Competences)** This module discusses the procedures of the German regional, formal and informal landscape planning system. Students develop an understanding of federal planning structures and the obligations of different authorities, enhancing their ability to make sound and strategic decisions. In addition, students discuss the different environmental assessment instruments. Moreover, EU legislation regarding spatial and environmental planning instruments is analyzed and discussed. Close cooperation with German authorities and institutions provides an insight into ongoing planning procedures. Upon completion of the class, the students are able to: • critically understand and discuss structures, frameworks and processes of landscape and regional planning especially with regard to sustainable landscape development, • reflect their professional practice in the context of landscape and regional planning systems especially with regard to sustainable landscape development.

3	**Course Content** The legal organization of administrative planning in Germany has been developed over a period of approximately two centuries, which had led to a very complex and sophisticated system being developed, which includes not only comprehensive planning, but different branches of sectoral planning focusing on sustainable landscape development as well. This system functions as a blueprint for many administrative systems in other countries, regardless of the fact that it might not always be as effective as people might expect. Planning System: • constitutional, political and administrative system, • system of planning levels and plans (objectives, scopes and functions), • further implications of planning methods. Regional Planning: • laws and associated planning instruments, • challenges and organization of Regional Planning. Landscape Planning in Germany: • laws and associated planning instruments, • instruments of environmental precaution and environmental impact management, • implementation and liability of landscape planning, • the European scope of Spatial, Environmental and Landscape Planning.
4	**Learning Methods** Within the seminar the students are required to work individually and in group settings. They analyze and reflect on the legal framework (planning levels, implementation and liability of landscape and regional planning) and associated planning instruments in Germany. Lectures, seminar, excursions.
5	**Participation Requirements** Understanding of landscape planning and development.
6	**Types of Examination and Grading** Type of examination: assignment (§14) The module is assessed on course work (100%). Grades respond to the German grading system: 1,0 = best grade; 4,0 = minimum to pass Grading scheme: 1,0 - 1,3 - 1,7 - 2,0 - 2,3 - 2,7 - 3,0 - 3,2 - 3,7 - 4,0. Students with any score above 4,0 fail the course. Weighting of this course for final grade: 5/82

7	**Conditions for Signature** Fulfilment of activities from section 1.1 – 1.3. Passing semester assignments.
8	**Language** English
9	**Methods of Monitoring the Quality of Teaching** Internal evaluations and surveys.
10	**Lecturer/s** Prof. Dr. Boris Stemmer; Assistance Lucas Kaußen M.Sc.
11	**Further Information** As the focus of the module will vary, a dedicated reading list will be specified each semester.

Sustainable Landscape Design and Development

Title of Course **Quality in Detailed Design**					
Code 9814	**Workload** 150 h	**Credits** 5 (ECTS)	**Semester** 1st Semester	**Frequency** Every winter semester	**Duration** One semester

1	**1.1 Teaching Activities**	**1.2 Time**	**1.3 Self-Study**	**1.4 Group Size**
	a) Lectures	2 SWS	90 h	20 Students
	b) Seminar / Excursions	2 SWS		

2	**Course Objectives (Competences)** Construction details are a vital part of landscape architecture. Details determine the quality and character of successful landscape architecture projects. This includes the decision process concerning materials in the context of the different elements of a landscape space and its environment as a functional part of the ecosystem. In this context, a new sustainable understanding should balance material and construction decisions in a responsible way and should understand the process of building as a sensible intervention in the environment. The module Quality in Detailed Design extends the student's existing knowledge of construction techniques and defines standards for special sustainable construction techniques in landscape architecture: construction site structures, building "by" and "with" water, building with topography, problematic soils for construction projects, greening technologies. Furthermore, the module defines important criteria for those techniques and for sustainable planning. Cooperation with landscape architecture authorities allows an exchange of actual every day planning experience and standards. Upon completion of the course students will: • be able to critically access and implement sustainable construction techniques, • gain a professional understanding of the implementation of materials and responsible technical solutions for a sustainable landscape architecture, • develop a deep understanding for successful detailing in landscape architecture, • have the ability to integrate qualitative detailing in the systems and processes of complex sustainable landscape architecture projects.

3	**Course Content** Special sustainable construction techniques in landscape architecture (lectures and practical exercises): • knowledge about materials and resources, sustainability, eco-indicators, cycling systems and recycling processes, • project phases and life cycling aspects, • drawings, rules and standards for technical drawings, • site structures / construction of hard surfaces: materials, constructions, requirements, • building "by" and "with" water: materials and hydraulic engineering, special sustainable construction solutions, • carefully building with topography: materials, stair and wall constructions, geotechnics, • problematic soils for construction projects: importance of soils in the ecosystem, requirements for building processes, carefully foundation techniques , • greening technologies: materials, construction techniques for green roofs and facades. Special sustainable construction techniques in Landscape Architecture / criteria and detailed design (project work, exercises): • responsible criteria for named construction techniques (mind map/ SWOT analysis), • developing sustainable detail solutions for a real project (drawings), • using new digital instruments and software, • field trips to compare detailed design and the results on site.
4	**Learning Methods** Lectures, seminar with practical work and excursions.

5	**Participation Requirements** Experience with detailed design as well as with CAD and related digital tools, interest in construction methods.
6	**Types of Examination and Grading** Type of examination: assignment (§14) The module is assessed on course work (100%). Grades respond to the German grading system: 1,0 = best grade; 4,0 = minimum to pass Grading scheme: 1,0 - 1,3 - 1,7 - 2,0 - 2,3 - 2,7 - 3,0 - 3,2 - 3,7 - 4,0. Students with any score above 4,0 fail the course. Weighting of this course for final grade: 5/82
7	**Conditions for Signature** Fulfillment of activities from section 1.1 – 1.3. Passing semester assignments.
8	**Language** English (may include German technical terms).
9	**Methods of Monitoring the Quality of Teaching** Internal evaluations and surveys.
10	**Lecturer/s** Prof. Dr.-Ing. Hendrik Laue
11	**Further Information** As the focus of the module will vary, a dedicated reading list will be specified each semester.

Sustainable Landscape Design and Development

Title of Course

Extra Muros 1

Code	Workload	Credits	Semester	Frequency	Duration
9818	120 h	4 (ECTS)	1st Semester	Every winter semester	One semester

1	1.1 Teaching Activities	1.2 Time	1.3 Self-Study	1.4 Group Size
	Excursions	4 SWS	60 h	20 Students

2 Course Objectives (Competences)

The course improves the understanding of the broad range of themes and fields of practice of sustainable landscape design and development.

Close cooperation with planning authorities and experts allows an active exchange between the students and external professionals during excursions.

- The course enables the students to analyze and develop a deeper understanding of sustainable landscape design and development projects and processes in their specific context.
- Students also experience professional situations and practice their communication skills in exchanging with external experts.

The Extra Muros 1 module includes the entire faculty. Therefore, the specific focus (i.e. planting design, detail planning, etc.) depends on the lecturer and varies with each excursion.

3	**Course Content** Field trips and workshops in Germany and Europe enable the students to develop a comprehensive understanding of sustainable landscape design and development practice by studying examples on-site and by discussing with professionals and experts. Field trips could include (examples): • Excursions to parks and post-industrial landscape solutions, meetings with the municipal landscape design and development authorities and with landscape architecture offices and sustainable landscape design and development agencies. • Visits to institutions involved in sustainable landscape design and development including the presentation and discussion with experts and/or field visits to places of special interest in sustainable landscape design and development. • Visits to destinations important for the development of planting design theories and sustainable planting design practice. Parks and/or botanical gardens are visited in order to understand international exchange and (re)presentation of plant material and habitats. • A workshop in Berlin, enabling a critical understanding of the historical as well as of the contemporary development of the city. The focus of the Berlin workshop lies in the landscape and open space based urban development of Germany's capital city and its diverse history with the influences of different regimes as a background for contemporary sustainable urban landscape projects.
4	**Learning Methods** Field trips, visits and workshop sessions. The acquired knowledge is applied and documented in small assignments.
5	**Participation Requirements** Interest in sustainable landscape design and development projects.
6	**Types of Examination and Grading** Course participation (e.g. presentations, assignments, preparation etc.) during the course. This is a pass or fail course.
7	**Conditions for Signature** Fulfillment of activities from section 1.1 – 1.3. Passing assignments.
8	**Language** English
9	**Methods of Monitoring the Quality of Teaching** Internal evaluations and surveys.
10	**Lecturer/s** Across faculty
11	**Further Information** As the focus of the module will vary, a dedicated reading list will be specified each semester.

Sustainable Landscape Design and Development

Title of Course **Urban Landscape Project**					
Code 9819	**Workload** 180 h	**Credits** 6 (ECTS)	**Semester** 1st Semester	**Frequency** Every winter semester	**Duration** One semester

1	**1.1 Teaching Activities**	**1.2 Time**	**1.3 Self-Study**	**1.4 Group Size**
	Project	4 SWS	120 h	20 Students

2 Course Objectives (Competences)

The Urban Landscape Project addresses practical as well as theoretical questions with a cross-disciplinary character in the field of sustainable landscape design and development. It enables the students to critically reflect on and develop sustainable planning and design strategies and to acquire competence in combining expertise with methodological knowledge. The students extend their expertise, skills, methods, and techniques in urban landscape design and development projects.

The project provides the framework to improve professional skills in:

- group work collaboration,
- self-organization and teamwork,
- conflict management,
- leadership,
- free speech,
- visual communication and presentation.

3	**Course Content** The course consists of: • deepening experience in the development process of a complex sustainable urban landscape design and development project, including site analysis and evaluation of a given spatial situation, • selecting, further developing, adapting and applying appropriate sustainable planning and design methods and techniques throughout the different scales, • working on a complex urban landscape case study and experiencing the methodical flow of a planning and design process in its successive steps, • advanced practice in structuring the planning and design process from analysis and concept development to design, • extending experience in planning and design tools and developing the ability to critically engage with professional urban landscape design and planning methods and techniques, • reflecting on the different elements of the urban landscape design project proposals in their long term systemic interdependencies. The project assignments focus on actual and relevant contemporary sustainable urban landscape challenges and vary from semester to semester.
4	**Learning Methods** Group work in a studio setting and site visits.
5	**Participation Requirements** Interest in sustainable design and development of urban landscapes. Experience in the organization and development of an urban landscape project and in drawing and layouting the needed plan documents.

6	**Types of Examination and Grading** Submission of project assignment: 75% Presentation and oral examination: 25% Grades respond to the German grading system: 1,0 = best grade; 4,0 = minimum to pass Grading scheme: 1,0 - 1,3 - 1,7 - 2,0 - 2,3 - 2,7 - 3,0 - 3,2 - 3,7 - 4,0. Students with any score above 4,0 fail the course. Weighting of this course for final grade: 6/82
7	**Conditions for Signature** Fulfillment of activities 1.1 – 1.3. Successful completion of the assignment, the presentation and colloquium (oral examination).
8	**Language** English
9	**Methods of Monitoring the Quality of Teaching** Internal evaluations and surveys.
10	**Lecturer/s** Prof. Dipl.-Ing. Elizabeth Sikiaridi, Prof. Dr. Stefan Bochnig, Prof. Dr. Hans-Peter Rohler
11	**Further Information** As the focus of the module will vary, a dedicated reading list will be specified each semester.

Sustainable Landscape Design and Development

Title of Course

Infrastructural Landscapes

Code	Workload	Credits	Semester	Frequency	Duration
9821	150 h	5 (ECTS)	2nd Semester	Every summer semester	One semester

1	1.1 Teaching Activities	1.2 Time	1.3 Self-Study	1.4 Group Size
	a) Seminar	3 SWS	90 h	20 Students
	b) Excursion	1 SWS		

2 Course Objectives (Competences)

Cities, agglomerations and rural areas are constantly changing in terms of mobility, energy supply, digitalization, etc.. These factors have social, environmental and visual impacts on the spatial environment. The course provides a critical understanding of the challenges that landscape architecture faces in the context of spatial infrastructure and sustainable infrastructure development.
Planning and maintenance in this field require interdisciplinary approaches that are based on the principles of sustainability and the different framework conditions inherent in infrastructure.

The students experience the integration of their professional expertise in the context of interdisciplinary and complex multi-stakeholder projects and processes.

The students examine and discuss professional considerations regarding the technical infrastructure. They deepen their experience with methods of sustainable landscape design and development and best practice in the field of infrastructure design.

Upon completion of the course students will have:

- a critical understanding of challenges in spatial infrastructure and its development,
- a deep understanding of interdisciplinary and sustainable infrastructural planning.

3	**Course Content** During the course, students experience the challenges of infrastructure design with regard to different stakeholders and requirements, methods and best practice within the framework of interdisciplinary work. Different infrastructure systems with their statutory requirements, their general conditions and institutional framework: • waterways, • highways, • power lines, • receiving waters, • railroad lines. Impact of infrastructure on social and spatial systems, assessment of urban and rural infrastructure projects: • waterways, • highways, • power lines, • receiving waters, • railroad lines, • landfills, • mining landscapes. Infrastructure landscapes in industrially formed regions: • Ruhr-District, • Industrial Garden Kingdom of Dessau-Wörlitz.
4	**Learning Methods** Seminar with practical work and excursions.
5	**Participation Requirements** Understanding of urban economic contexts and of large-scale planning correlations.

6	**Types of Examination and Grading** Type of examination: assignment (§14) The module is assessed on course work (100%). Grades respond to the German grading system: 1,0 = best grade; 4,0 = minimum to pass Grading scheme: 1,0 - 1,3 - 1,7 - 2,0 - 2,3 - 2,7 - 3,0 - 3,2 - 3,7 - 4,0. Students with any score above 4,0 fail the course. Weighting of this course for final grade: 5/82
7	**Conditions for Signature** Fulfillment of activities from section 1.1 – 1.3. Passing semester assignments.
8	**Language** English
9	**Methods of Monitoring the Quality of Teaching** Internal evaluations and surveys.
10	**Lecturer/s** Prof. Dr. Hans-Peter Rohler
11	**Further Information** As the focus of the module will vary, a dedicated reading list will be specified each semester.

Sustainable Landscape Design and Development

Title of Course **Planning Ahead: Development through Maintenance**					
Code	**Workload**	**Credits**	**Semester**	**Frequency**	**Duration**
9822	150 h	5 (ECTS)	2nd Semester	Every summer semester	One semester

1	**1.1 Teaching Activities**	**1.2 Time**	**1.3 Self-Study**	**1.4 Group Size**
	a) Seminars / Tutorials	3 SWS	90 h	20 Students
	b) Excursions	1 SWS		

2	**Course Objectives (Competences)** Students deepen their understanding of how to design planting schemes considering relevant maintenance concerns. They critically discuss maintenance tools and methods and meet professionals involved at different maintenance levels, for example experts from authorities or landscape architects. The course covers different forms of maintenance and their specification, allowing students to enhance their understanding and plan the development of sustainable plantings over time (including life-cycle costs). The course focuses on naturalistic planting design, so students extend their insight into the dynamic development of planting schemes (as opposed to static schemes which need to be maintained at an *'as is'*- level). Upon completion of the course students will be able to: • specify maintenance tasks for planting schemes thereby planning the development of planting schemes within certain parameters, • understand life-cycle costs and the relevance of planning maintenance. Furthermore students acquire: • a knowledge of the challenges of sustainable planting design in urban areas, • an understanding of maintenance work and tools, • comprehension of intensive and extensive maintenance programs, • an appreciation of follow-up costs for planting design.

3	**Course Content** The course explores the development of planting schemes through maintenance. It focuses on the specific challenges of sustainable planting design in urban areas under increasingly problematic conditions (climate change, budget restrictions, etc.). Often the answer to this is designing habitat-based and therefore allegedly low maintenance plant(ed) communities. The module critically discusses a broad range of naturalistic planting design concepts and explores possibilities of extensification of maintenance. Its focus however does not lie in planning new planting schemes but in maintenance as a continuation of design. The module focuses on schemes in Germany and Europe. Furthermore, students are welcome to contribute examples of their own geographic origins. Field trips to nearby parks and the University's own botanical garden provide a direct experience of smart designed plantings. Extensification through naturalistic design: • history of naturalistic planting design and its influence on current approaches to sustainable planting design, • maintenance of such schemes throughout the year. Specifying maintenance: • project development maintenance / establishment maintenance, • plant maintenance programs, • life cycle costs. Current practice of: • maintenance in different settings, • municipalities, • landscape architecture practices, • landscape contractors.
4	**Learning Methods** Within the seminar and the tutorials the students are required to work individually and in group settings. They give presentations and improve their drawing skills as well as discuss maintenance with different stakeholders and in different settings. They work on the specification of maintenance programs for different levels of upkeep. Lectures, seminar, tutorials and excursions.
5	**Participation Requirements** Students should have completed the course 9812 Sustainable Planting Design or have acquired similar knowledge of plants and planting design.

6	**Types of Examination and Grading** Type of examination: assignment (§14) The module is assessed on course work (100%). Grades respond to the German grading system: 1,0 = best grade; 4,0 = minimum to pass Grading scheme: 1,0 - 1,3 - 1,7 - 2,0 - 2,3 - 2,7 - 3,0 - 3,2 - 3,7 - 4,0. Students with any score above 4,0 fail the course. Weighting of this course for final grade: 5/82
7	**Conditions for Signature** Fulfillment of activities from section 1.1 – 1.3. Passing semester assignments.
8	**Language** English
9	**Methods of Monitoring the Quality of Teaching** Internal evaluations and surveys.
10	**Lecturer/s** Junior Prof. Nora Huxmann M.Sc.
11	**Further Information** As the focus of the module will vary, a dedicated reading list will be specified each semester.

Sustainable Landscape Design and Development

Title of Course

Participatory Landscape Development and Design

Code	Workload	Credits	Semester	Frequency	Duration
9823	150 h	5 (ECTS)	2nd Semester	Every summer semester	One semester

1	1.1 Teaching Activities	1.2 Time	1.3 Self-Study	1.4 Group Size
	a) Lectures	2 SWS	90 h	20 Students
	b) Seminar / Excursions	2 SWS		

2 Course Objectives (Competences)

Landscape is a subject that matters to everybody. Therefore sustainable landscape development and design needs participatory approaches to match people's expectations of 'ideal' landscapes and to include the landscape ideas and concepts of minorities. The Council of Europe emphasizes these requirements of sustainable landscape design and development by stating "landscape means an area as perceived by people [...]" in article 1a of the European Landscape Convention.

This idea is the basis for this course's objective. Highlighting the scenic quality and cultural landscape assessment, students deepen their understanding of landscape architects' expertise and critically discuss and evaluate the approaches that bring this expertise together with public participation processes. The module aims to broaden the students' skills to neighboring disciplines such as environmental psychology and social science.

Landscape assessment is not the only issue that promotes participatory approaches. Every spatial plan or policy that affects space and landscape can benefit from participatory approaches. On completion of the course students are moreover able to transfer the outcomes to other planning tasks and sectors.

Upon completion of the course students:

- will professionalize their related communication and mediation skills,
- will further enhance their media competences.

3	**Course Content** The course critically discusses: • the theory of participation in spatial and landscape development (psychology, sociology, philosophy, planning theory), • legal instruments and obligation for participation in planning processes, • legal instruments of sustainable landscape development and spatial planning, • participatory methods of planning especially verbal and visual communication in planning, • methods of participatory landscape and scenic value assessment, • the role of minorities in planning processes, • the implication of participation processes in democratic decision making. Many communities in Germany - often with a heterogeneous population – implement the practice of public participation when city developing projects occur. This allows students to attend such meetings during study trips.
4	**Learning Methods** Within the seminar the students are required to work on assignments individually and in group settings. Lectures, seminar with practical work and excursions.
5	**Participation Requirements** Understanding of: • Planning System in Germany, • Planning Legislation in Germany and Europe.
6	**Types of Examination and Grading** Type of examination: assignment (§14) The module is assessed on course work (100%). Grades respond to the German grading system: 1,0 = best grade; 4,0 = minimum to pass Grading scheme: 1,0 - 1,3 - 1,7 - 2,0 - 2,3 - 2,7 - 3,0 - 3,2 - 3,7 - 4,0. Students with any score above 4,0 fail the course. Weighting of this course for final grade: 5/82
7	**Conditions for Signature** Fulfillment of activities from section 1.1 – 1.3. Passing semester assignments.
8	**Language** English
9	**Methods of Monitoring the Quality of Teaching** Internal evaluations and surveys.

10	**Lecturer/s** Prof. Dr. Boris Stemmer; Assistance Lucas Kaußen M.Sc.
11	**Further Information** As the focus of the module will vary, a dedicated reading list will be specified each semester.

Sustainable Landscape Design and Development

Title of Course **Sustainable Landscape Architecture**					
Code 9824	**Workload** 150 h	**Credits** 5 (ECTS)	**Semester** 2nd Semester	**Frequency** Every summer semester	**Duration** One semester

1	**1.1 Teaching Activities**	**1.2 Time**	**1.3 Self-Study**	**1.4 Group Size**
	a) Lectures	2 SWS	90 h	20 Students
	b) Seminar / Excursions	2 SWS		

2	**Course Objectives (Competences)** Sustainable landscape architecture integrates ecological, economic, social and technical criteria into the process of design, building and maintenance. Sustainable landscape architecture seeks the best solution regarding the environment and the needs of coming generations (this includes protecting habitats, protecting soils, integrating stormwater management and conserving water resources, balancing social, ecological and economic aspects). An integral planning process respects any location with its context and its special characteristics as well as possible developments and construction methods and the application and subsequent conversion or future renaturation. The module Sustainable Landscape Architecture supports students in expanding their understanding of sustainable qualities and criteria related to planning. The module extends the existing comprehension of sustainability and planning with the aim to develop a sustainable project. The students discuss and examine in this context sustainable aspects, sustainable business ideas and criteria of landscape architecture projects. The students apply and reflect existing international and national sustainable goals, existing green assessment methods and guidelines. The course provides the students: • with a profound framework to professionalize their competences in decision making in the context of sustainable landscape architectural solutions, • with a deep understanding of ecological, economic, social and technical interdependencies in the process of design, building and maintenance.

3	**Course Content** Develop a sustainable landscape architecture project by: Applying and reflecting sustainable qualities and criteria, sustainable business ideas: • location: chances and risks, system boundary and sustainability, • ecology: ecosystem functions, effects on the environment (biodiversity, risks, protection and development), ecological resources (soils, water, climate, plants, materials), • economy: life cycle costs, value development, economic planning and operating quality, • socio-cultural: sojourn quality, infrastructure and integration, design and esthetics, • technical: maintenance, construction, resources, • process: project development, integral planning and procedures, construction, management, • materials: recycling techniques, aspects of reutilization, life cycle assessments, meaning of eco-footprint. Applying and reflecting sustainable goals, green assessment methods and rating systems: • International (UN), national (Germany) sustainable goals and strategies, Biodiversity goals and strategies (CBD /UN and NBSAP/Germany) international assessment systems (BREEAM; LEED), • German assessment systems (DGNB, BNB_AA), • Guidelines for sustainable landscape architecture, • examples of sustainable projects.
4	**Learning Methods** Lectures, seminar with practical work (assignments) and excursions.
5	**Participation Requirements** Experience in and understanding of sustainable landscape design and development.

6	**Types of Examination and Grading** Type of examination: assignment (§14) The module is assessed on course work (100%). Grades respond to the German grading system: 1,0 = best grade; 4,0 = minimum to pass Grading scheme: 1,0 - 1,3 - 1,7 - 2,0 - 2,3 - 2,7 - 3,0 - 3,2 - 3,7 - 4,0. Students with any score above 4,0 fail the course. Weighting of this course for final grade: 5/82
7	**Conditions for Signature** Fulfillment of activities from section 1.1 – 1.3. Passing semester assignments.
8	**Language** English
9	**Methods of Monitoring the Quality of Teaching** Internal evaluations and surveys.
10	**Lecturer/s** Prof. Dr.-Ing. Hendrik Laue
11	**Further Information** As the focus of the module will vary, a dedicated reading list will be specified each semester.

Sustainable Landscape Design and Development

Title of Course **International Urban Landscapes**					
Code 9825	**Workload** 150 h	**Credits** 5 (ECTS)	**Semester** 2nd Semester	**Frequency** Every summer semester	**Duration** One semester

1	**1.1 Teaching Activities**	**1.2 Time**	**1.3 Self-Study**	**1.4 Group Size**
	Seminar	3 SWS	90 h	20 Students
	Excursion	1 SWS		

2	**Course Objectives (Competences)** Through the study and critical reflection of international urban landscape projects, students deepen their understanding of the contemporary discourse and practice in sustainable urban landscape design and development and landscape urbanism in a global context. By addressing today's upcoming urban landscape challenges, the course extends typological knowledge of a broad range of landscape and open space based urban development practices. The course enhances the capacity to understand different local urban landscape situations in order to be able to intervene in diverse international contexts. Students reflect on the role of landscape design and development and landscape urbanism in the sustainable development of cities and regions in a globalized planning context. Upon completion of the course students will have: • a deeper understanding of and the ability to critically reflect on the role of sustainable landscape design and development in a global context, • further extended their typological knowledge of international urban development practices.

3	**Course Content** The course consists of: • discussing the broad range of themes of sustainable landscape design and development and its fields of activity in different international urban contexts, • research, analysis and evaluation of urban landscape projects and critical reflection on urban landscape strategies, • exemplary study of historical urban landscapes and open spaces enhancing the understanding of the origin and development of international urban landscapes, • examining how a cultural setting translates into urban landscape practices and how the design and use of open urban spaces is embedded in specific socio-cultural backgrounds, • addressing the functional, ecological, esthetic and cultural dimension of urban landscapes, focusing on contemporary projects and practices relevant for dealing with upcoming global urban challenges, • deepening the understanding of typological open space and green systems and the connection between built environments with open spaces and urban landscape in respect of human needs, human scale, social aspects and patterns of use, • critically discussing the role and general fields of activity of professional planners in the context of different societal players involved in the development of sustainable urban landscapes, • studying the role of landscape design and development in enhancing urban communities' quality of life, developing site-specific, sustainable solutions for urban challenges such as resources, climate adaptation and mitigation, accelerated urban growth as well as shrinking, and wellbeing and health, • a critical understanding of the role of detailed analysis and discussion of landscape design and development in the sustainable development of cities and regions in the 21st century.
4	**Learning Methods** Within the seminar the students are required to work on assignments individually and in group settings. Seminar and excursion.

5	**Participation Requirements** Experience and understanding of international sustainable landscape design and development projects.
6	**Types of Examination and Grading** Type of examination: assignment (§14) The module is assessed on course work (100%). Grades respond to the German grading system: 1,0 = best grade; 4,0 = minimum to pass Grading scheme: 1,0 - 1,3 - 1,7 - 2,0 - 2,3 - 2,7 - 3,0 - 3,2 - 3,7 - 4,0. Students with any score above 4,0 fail the course. Weighting of this course for final grade: 5/82
7	**Conditions for Signature** Fulfillment of activities from section 1.1 – 1.3. Passing semester assignments.
8	**Language** English
9	**Methods of Monitoring the Quality of Teaching** Internal evaluations and surveys.
10	**Lecturer/s** Prof. Dipl.-Ing. Elizabeth Sikiaridi
11	**Further Information** As the focus of the module will vary, a dedicated reading list will be specified each semester.

Sustainable Landscape Design and Development

Title of Course **User-oriented Open Space Development**					
Code	**Workload**	**Credits**	**Semester**	**Frequency**	**Duration**
9826	150 h	5 (ECTS)	2nd Semester	Every summer semester	One semester

1	**1.1 Teaching activities**	**1.2 Time**	**1.3 Self-Study**	**1.4 Group Size**
	a) Lectures	2 SWS	90 h	20 Students
	b) Seminar	2 SWS		

2	**Course Objectives (Competences)** The course deals theoretically and practically with the various methods of social space analysis as a basis for user-oriented open space and urban planning. Social space analysis enables the qualities of spatial and social living conditions in different neighborhoods to be compared. Based on social space analysis, goals, guidelines and planning proposals for urban and open space development can be derived. With concrete social spaces that serve as case studies, the different theoretical approaches are tested and planning proposals developed, discussed and reflected upon. The students deepen their understanding of socio-spatial contexts in urban open spaces. They expand and deepen their understanding of the possibilities of open space planning for sustainable and user-oriented urban and open space development. Upon completion of the course students will be able to: • analyze social spaces using different, appropriate methods, • carry out goal-oriented social space analysis, • translate analysis results into appropriate planning responses.
3	**Course Content** • different methods of a planning-oriented social space analysis (data evaluation, observation, different interview techniques, walks), • interpretation of different analysis results, • translation of analysis results into concrete sustainable open space planning.
4	**Learning Methods** Students work individually and in group settings. The teaching approach consists of both lectures and a seminar in a studio format.
5	**Participation Requirements** Understanding of social processes and sociological contexts. Experience in open space planning and development on different scales.

6	**Types of Examination and Grading** Type of examination: assignment (§14) The module is assessed on course work (100%). Grades respond to the German grading system: 1,0 = best grade; 4,0 = minimum to pass Grading scheme: 1,0 - 1,3 - 1,7 - 2,0 - 2,3 - 2,7 - 3,0 - 3,2 - 3,7 - 4,0. Students with any score above 4,0 fail the course. Weighting of this course for final grade: 5/82
7	**Conditions for Signature** Fulfillment of activities from section 1.1 – 1.3. Passing semester assignments.
8	**Language** English
9	**Methods of Monitoring the Quality of Teaching** Internal evaluations and surveys.
10	**Lecturer/s** Prof. Dr. Stefan Bochnig, Prof. Dr. Hans-Peter Rohler
11	**Further Information** As the focus of the module will vary, a dedicated reading list will be specified each semester.

Sustainable Landscape Design and Development

Title of Course **Digital Tools in Sustainable Landscape Architecture and Public Spatial Planning**					
Code 16061	**Workload** 150 h	**Credits** 5 (ECTS)	**Semester** 2nd Semester	**Frequency** Every summer semester	**Duration** One semester

1	**1.1 Teaching activities**	**1.2 Time**	**1.3 Self-Study**	**1.4 Group Size**
	a) Lectures	2 SWS	90 h	20 Students
	b) Seminars / Excursion	2 SWS		

2	**Course Objectives (Competences)** The course deepens practical as well as theoretical knowledge about digital tools in the fields of public spatial planning, in addition to landscape architecture. The goal is to use these tools to create sustainable workflows, and to evaluate the planned environment according to the Sustainable Development Goals. It enables students to critically reflect on the benefits of digital tools, so that they acquire competence in decision-making on when and how to use which tool efficiently. Through digital tools the planning process can be orchestrated in a way that allows the optimization of decision making. As we confront the traditional processes with tools such as parametric design and AI powered decision trees, we will approximate a more fact-based planning approach. In this context, students develop spatial situations that can address contemporary ecological challenges. The course provides the framework to improve professional skills in: • multidimensional modelling, • self-organization and teamwork on server-based infrastructure, • parametric modelling, • logical decision-making, • standardization of complex and abstract objects, • the use of IFC conform object notation, • reporting, • quantity determination and mass investigation, • construction scheduling, • digital ethics, • visual communication and presentation. -

3	**Course Content** Students work on digital planning and reporting tasks at local, regional and national scales. They develop strategies and models that integrate design within the Sustainable Development Goals. Contemporary technologies enable students to evaluate the impact on economies and ecologies, integrating these outcomes into the process of environmental design. Their decisions will therefore become more data driven and objectively justifiable than impacted by emotional and subjective preferences. Such quantifiable decision processes aim to be relevant in settings with many conflicting interests. They therefore intensify their knowledge on how to: • evaluate the usage of different digital approaches, • use digital tools during the planning process, • analyze quantifiable aspects of environmental influences such as insolation, rainfall, wind, etc., • apply rules of mathematical logics to decision-making, • understanding programming structure, • use sensors to collect environmental data with microcontrollers, • condense the collected data for better decisions, • use GIS in the design workflow, • describe BIM/LIM conform data structures, • report the sustainability impacts of the planned structures through analysis tools, • advance their abilities to structure the planning and design process from analysis and concept development to design through optimized computer-based workflows, • reflect on the different elements of digital tools in landscape design. The assignments focus on actual and relevant tools and vary from semester to semester.

4	**Learning Methods** Lectures, group work and site visits.
5	**Participation Requirements** Knowledge about CAD-Modelling and basic understanding about digital tools.
6	**Types of Examination and Grading** Type of examination: assignment (§14) The module is assessed on course work (100%). Grades respond to the German grading system: 1,0 = best grade; 4,0 = minimum to pass Grading scheme: 1,0 - 1,3 - 1,7 - 2,0 - 2,3 - 2,7 - 3,0 - 3,2 - 3,7 - 4,0. Students with any score above 4,0 fail the course. Weighting of this course for final grade: 5/82
7	**Conditions for Signature** Fulfillment of activities from section 1.1 – 1.3. Passing semester assignments.
8	**Language** English
9	**Methods of Monitoring the Quality of Teaching** Internal evaluations and surveys.
10	**Lecturer/s** Prof. Tobias Haelke
11	**Further Information** As the focus of the module will vary, a dedicated reading list will be specified each semester.

Sustainable Landscape Design and Development

Title of Course **Innovative Planting Design for Sustainable Cities**					
Code	**Workload**	**Credits**	**Semester**	**Frequency**	**Duration**
XXXXX	150 h	5 (ECTS)	2nd Semester	Every summer semester	One semester

1	**1.1 Teaching activities**	**1.2 Time**	**1.3 Self-Study**	**1.4 Group Size**
	a) Lectures	1 SWS	90 h	20 Students
	b) Seminars / Tutorials	2 SWS		
	c) Excursions	1 SWS		

2	**Course Objectives (Competences)** Learning from nature - transferring templates of natural vegetation into biodiverse, well balanced and artistic horticultural plant communities for sustainable cities. In contemporary planting design natural plant communities and habitats are often used as templates and reference models for designed plantings in urban areas. The focus is on innovative vegetation concepts for blue-green infrastructure, bioswales, retention and evaporation systems as well as roof gardening and facade greening. Students look at various aspects of different planting concepts and planting strategies and their consequences for planning effort and maintenance. The course also considers how the plantings will develop long-term. Students will develop and design a project in a realistic situation in public or semi-public urban green. They will have the chance to experience an exclusive view of contemporary planting design principles for sustainable planting design in public green spaces. They will discuss and analyze examples of realized plantings in various situations and will deepen their knowledge through practical planning sessions. The course focuses on naturalistic, biodiverse planting design, so students extend their insight into the dynamic development of planting schemes (as opposed to static schemes which need to be maintained at an 'as is'- level). Upon completion of the course students will be able to: - use nature as an ecological palette for planting design and how to adapt these models to enhanced versions in planting design, - understand different vegetation types and their ecology: for example, Middle European dry plant communities and dry woodland edges, seasonally dry/ wet Eurasian vegetation, Eastern European and Central Asian steppe, Mediterranean garrigue and North American prairie vegetation, - deepen their knowledge about different garden habitats of perennials and suitable plant selection (shade/ semi shade, open dry ground with stress-tolerant plantings, open seasonally moist ground with competitive plantings, - select different perennial planning strategies to realize an effective perennial planting scheme, - understand the consequences for dynamic processes in the planting, amount of maintenance and planning effort, - design a perennial mixed planting, including plant selection after different functional types, determination of proportions of individuals in the planting. scheme, learning about different levels of sociability and how to archive a useful layering within the planting, - draw cross sections of their designed planting, - use and design a phenological spread sheet for your selected plant palette.

3	**Module outline** The course explores the development of planting schemes through transferring templates of natural vegetation into biodiverse, well balanced and artistic horticultural plant communities for sustainable cities. It focuses on the specific challenges of sustainable planting design in urban areas under increasingly problematic and stressful conditions (climate change, heat island effect, flooding, drought, budget restrictions, etc.). Often the answer to this is designing habitat-based and therefore allegedly low maintenance plant(ed) communities. The module critically discusses a broad range of static to dynamic and naturalistic planting design concepts and explores possibilities of extensification of planning effort and maintenance. The module focuses on schemes in Germany and Europe. Furthermore, students are welcome to contribute examples of their own geographic origins. Field trips to nearby parks and the University's own botanical garden provide a direct experience of smart designed plantings. Students develop a sustainable planting design for a particular urban habitat in an ecologically challenging situation. They go through the steps necessary to achieve an effective design that presents an enhanced and stylized version of nature, with a focus on plant distribution - matrix planting, layered planting, mosaic and groups and how to select plants for randomized mixed planting concepts, managed through a dynamic maintenance regime. Specific input lectures support the planning process. Possible themes of input lectures depending on the focus of the annual studio project: • Habitat based contemporary planting design – examples of urban designs. • Natural plant communities as templates for naturalistic and resilient planting design. • Planning strategies for perennial plantings: from static to dynamic, from limited species richness to biodiverse and complex concepts. • Starting from static monocultural/ block plantings and formal drift plantings over semi-dynamic mosaic plantings to layered naturalistic habitat-based plantings to highly dynamic, complex randomized mixed planting concepts. • Using different strategy types of plants to achieve resilient horticultural plant communities with a high level of coexistence between species. • Future trees (climate resilient trees) for inner city environments. • Resilient plants for rain gardens and bioswales with seasonally dry or seasonally wet conditions. Biodiverse plantings for evaporation beds and cascade bioswale systems.

4	**Learning Methods** Within the seminar and the tutorials, the students are required to work individually and in group settings. They practice presentation and drawing skills as well as working with different historical sources and materials. They engage in the use of nursery catalogues and other media of plant selection. Lectures, seminars and tutorials, and excursions.
5	**Participation Requirements** Apart from an interest in plants and planting design, no participation requirements have to be met. Any previous knowledge will be appreciated but is not a prerequisite.
6	**Types of Examination and Grading** Type of examination: assignment (§14) The module is assessed on course work (100%). Grades respond to the German grading system: 1,0 = best grade; 4,0 = minimum to pass Grading scheme: 1,0 - 1,3 - 1,7 - 2,0 - 2,3 - 2,7 - 3,0 - 3,2 - 3,7 - 4,0. Students with any score above 4,0 fail the course. Weighting of this course for final grade: 5/82
7	**Conditions for Signature** Fulfillment of activities from section 1.1 – 1.3. Passing semester assignments.
8	**Language** English
9	**Methods of Monitoring the Quality of Teaching** Internal evaluations and surveys.
10	**Lecturer/s** Prof. Dipl.-Ing Cassian Schmidt / M.Sc. Jessica Gabler
11	**Further Information** As the focus of the module will vary, a dedicated reading list will be specified each semester.

Sustainable Landscape Design and Development

Title of Course **Extra Muros 2**					
Code 9828	**Workload** 120 h	**Credits** 4 (ECTS)	**Semester** 2nd Semester	**Frequency** Every summer semester	**Duration** One semester

1	**1.1 Teaching Activities**	**1.2 Time**	**1.3 Self-Study**	**1.4 Group Size**
	Excursions	4 SWS	60 h	20 Students

2	**Course Objectives (Competences)** The aim of the course is to deepen the understanding of a broad spectrum of themes and fields of practice in sustainable landscape design and development in Germany and Europe, providing a wealth of professional knowledge. A specific focus is laid on sustainability and on areas of the profession poised to gain international importance such as healthy cities, climate adaption, water-sensitive design and planning, energy landscapes, urban agriculture, gender equal city, biodiversity, maintenance of urban green, etc.. • The course enables the students to further advance their skills in analyzing and developing a deeper understanding of sustainable landscape design and development in their specific context. • Students also professionalize their communication skills in interaction and exchange with external experts. The Extra Muros 2 module includes the entire faculty. Therefore, the specific focus (i.e. planting design, landscape planning and development, etc.) depends on the lecturer and varies with each excursion.

3	**Course Content** Field trips and workshops in Germany and Europe enable the students to develop a comprehensive understanding of sustainable landscape design and development practice by studying examples on-site and by discussing with professionals and experts. Field trips could include (examples): • Metropolitan areas which offer various destinations for contemporary sustainable landscape design and development projects, renaturation of post-industrial landscapes and landfill projects, or water management projects. • Visits to relevant project areas that have been developed with a participatory approach and meetings with involved institutions and citizens. • Cities in Germany and Europe are visited for aspects of sustainability and maintenance of urban green. The focus of the field trips widens the international reception, integration and further development of planting design in Europe. • A design workshop in Berlin, addressing contemporary urban sustainability challenges, focusing on today's landscape and open space urban development of Germany's capital city.
4	**Learning Methods** Field trips, visits and workshop sessions. The acquired knowledge is applied and documented in small assignments.
5	**Participation Requirements** Experience and understanding of sustainable landscape design and development projects.
6	**Types of Examination and Grading** Course participation (e.g. presentations, assignments, preparation etc.) during the course. This is a pass or fail course.
7	**Conditions for Signature** Fulfillment of activities from section 1.1 – 1.3. Passing assignments.
8	**Language** English
9	**Methods of Monitoring the Quality of Teaching** Internal evaluations and surveys.
10	**Lecturer/s** Across faculty
11	**Further Information** As the focus of the module will vary, a dedicated reading list will be specified each semester.

Sustainable Landscape Design and Development

Title of Course **Landscape Planning and Development Project**					
Code 9829	**Workload** 150 h	**Credits** 6 (ECTS)	**Semester** 2nd Semester	**Frequency** Every summer semester	**Duration** One semester

1	**1.1 Teaching Activities**	**1.2 Time**	**1.3 Self-Study**	**1.4 Group Size**
	Project	4 SWS	90 h	20 Students

2	**Course Objectives (Competences)** Students improve their ability to address complex tasks in sustainable landscape development at local, regional and national levels. They combine their know-how derived from the different prior sustainable landscape development modules and apply them to a semester project. The students deepen their: • understanding of the integration of functional, social, cultural, economic, ecological aspects into sustainable landscape development processes, • expertise in development and use of complex objective landscape assessment methods, • competences in development and critical reflection of development aims, subjects and methods, • ability in interdisciplinary approaches to sustainable landscape development, • understanding of the different elements of the landscape planning and development project in their long term systemic interdependencies, • competences in the development of strategic solutions to complex tasks, • understanding of gender research.
3	**Course Content** Students work on planning tasks of local, regional or national scales. Subject might be informal or formal planning processes such as: • legal landscape plans, • sustainable landscape development concept, • sectoral development plans (e.g. renewable energies, biodiversity, sustainability), • legal regional planning, • sustainable regional development.
4	**Learning Methods** Group work in a studio setting.

5	**Participation Requirements** Understanding of: • Planning System in Germany, • Planning Legislation in Germany and Europe. Ability to: • organize, develop and conduct an approach to a planning task in sustainable landscape development, • draw and layout maps, • write planning documents.
6	**Types of Examination and Grading** Submission of project assignment: 75% Presentation and oral examination: 25% Grades respond to the German grading system: 1,0 = best grade; 4,0 = minimum to pass Grading scheme: 1,0 - 1,3 - 1,7 - 2,0 - 2,3 - 2,7 - 3,0 - 3,2 - 3,7 - 4,0. Students with any score above 4,0 fail the course. Weighting of this course for final grade: 6/82
7	**Conditions for Signature** Fulfillment of activities 1.1 – 1.3. Successful completion of the assignment, the presentation and colloquium (oral examination).
8	**Language** English
9	**Methods of Monitoring the Quality of Teaching** Internal evaluations and surveys.
10	**Lecturer/s** Prof. Dr. Boris Stemmer; Assistance Lucas Kaußen M.Sc.
11	**Further Information** As the focus of the module will vary, a dedicated reading list will be specified each semester.

Sustainable Landscape Design and Development

Title of Course **Internship**					
Code 9830	**Workload** 900 h	**Credits** 30 (ECTS)	**Semester** 3rd Semester	**Frequency** Every winter semester	**Duration** Min. 19 weeks

1	**1.1 Teaching Activities**	**1.2 Time**	**1.3 Self-Study**	**1.4 Group Size**
	Internship with counseling by supervising professor	Duration 19 weeks min.	900 h	1 student (individual internship)

2	**Course objectives (competences)** During the Internship, students are exposed to everyday life in a professional work environment. They experience the procedures in a planning office or institution and apply the skills and expertise they have acquired. The course objectives are to: • gain practical work experience in a German or international landscape architecture office or related sustainable landscape design and development institution, • understand the structures of planning processes in landscape architecture firms and / or sustainable landscape design and development organizations and authorities, • apply professional knowledge and expertise in a social and economic context, • assess the opportunities, as well as the responsibilities and risks, that own actions have within the professional environment, • develop a personal profile in respect of the student's further development in different sustainable landscape design and development specializations.

3	**Course Content** The students plan their Internship based on the goals stated in their motivation statement. The first step towards interning at a landscape architecture institution is to successfully apply for a position. The location of the preferred office is not limited to Germany but can be anywhere in the world. Once hired, the individual goals may differ depending on the kind of institution. The students are exposed to the working environment of a landscape architecture office or related sustainable landscape design and development institution, developing: • professional and social skills, • economic parameters in consideration of the practice, • the ability to apply planning processes in a real working environment, • insights into the ongoing developments in the field of landscape architecture and planning, • self-organization in respect of time management and work load accomplishment, • work processes in a planning office environment. The Internship is counseled by a supervising professor.
4	**Learning Methods** • Motivation statement (part of the student's application), • preparatory seminar, • Internship, • final report.
5	**Participation Requirements** Passing at least eight modules from the first and second semester.
6	**Types of Examination and Grading** This is a pass or fail module.
7	**Conditions for Signature** Fulfillment of activities from section 1.1 – 1.3. Motivation statement and final report. Certificate from the employer regarding the student's achievements.

8	**Language** English (possibly also German, depending on internship position).
9	**Methods of Monitoring the Quality of Teaching** Internal evaluations and surveys.
10	**Lecturer/s** Across Faculty
11	**Further Information** Students may choose relevant literature according to the specifications of their internship.

Sustainable Landscape Design and Development

Title of Course **Master Thesis**					
Code	**Workload**	**Credits**	**Semester**	**Frequency**	**Duration**
9840	900 h	30 (ECTS)	4th Semester	Summer semester or as coordinated with supervisor	Max. 4 months

1	**1.1 Teaching Activities**	**1.2 Time**	**1.3 Self-Study**	**1.4 Group Size**
	Counseling by supervising professor	max. 4 months (0,4 SWS counseling by supervisor)	900 h	1 student (group work possible in coordination with supervisor)

2 Course objectives (competences)

Master Thesis (27 ECTS):

During the thesis stage, students mostly self-organize their work on their chosen topic (in coordination with a lecturer). The students apply their creative and analytical thinking and designing skills as well as their knowledge of scientific research. With the thesis, the students demonstrate their ability to further develop their work on a topic - from detecting and formulating a problem through its analysis to finding a solution. The students demonstrate their acquired skills in research, analysis, synthesis and problem solving.

The thesis demonstrates that the student is capable of independent work, according to scientific methods, on a theoretical challenge and/or on a practice-oriented, job-related task within his or her area of expertise. The research topic is to be investigated in its interdisciplinary contexts as well as in its (possibly also technical) details.

Colloquium (3 ECTS):

The colloquium (oral examination) complements the thesis and is assessed independently. Its purpose is to determine whether the student is able to professionally present the results of her or his thesis coherently.

With the completion of the Master Thesis and Colloquium, the students prove their enhanced and professionalized abilities in:

- scientific research,
- analysis and synthesis,
- detecting, formulating and solving sustainable landscape design and development problems and challenges,
- creative design.

3	**Course Content** Master Thesis: In general, the thesis consists of independent research of a defined complex task – be that a design challenge or a theoretical question in relation to a planning subject matter. A detailed description and explanation of the suggested solution has to be provided. The thesis can consist of a design and planning project and/or be a theoretical dissertation, based on professional literature and/or empirical investigation. The formal and content-related requirements are discussed and determined in detail with the supervising professors. Colloquium: The exact focus of the colloquium (oral examination) is to be defined according to the subject of the thesis. The colloquium addresses the relevant subject-related core issues as well as the interdisciplinary context and references. Students orally defend their work and in doing so evaluate its significance for the theory and practice of Sustainable Landscape Design and Development.
4	**Learning Methods** Largely self-organized study of an individual topic; individual feedback from the thesis supervisors.
5	**Participation Requirements** Passing the courses from the 1st and 2nd semesters. (Two of the courses may be pending but have to be successfully completed by the end of the thesis semester). Passing the Internship.
6	**Types of Examination and Grading** Master Thesis (90 %) = 27 ECTS Colloquium (10 %) = 3 ECTS Grades respond to the German grading system: 1,0 = best grade 4,0 = minimum to pass Grading scheme: 1,0 - 1,3 - 1,7 - 2,0 - 2,3 - 2,7 - 3,0 - 3,2 - 3,7 - 4,0. Students with any score above 4,0 fail the course. Weighting of this course for final grade: 30/82

7	**Conditions for Signature** Passing the thesis. Passing the colloquium (oral examination). Students will be admitted to the colloquium if their thesis has been allocated a pass grade (1,0 – 4,0). Both the thesis and the oral presentation/colloquium have to be passed to successfully complete the module.
8	**Language** English
9	**Methods of Monitoring the Quality of Teaching** Internal evaluations and surveys.
10	**Lecturer/s** Across Faculty
11	**Further Information** Students choose relevant literature according to the specifications of their thesis topic. Students choose one main and one assisting supervisor in order to coordinate and obtain feedback while working on their thesis..

Anhang 1 / Attachment 1 (Deutsch)

Studienverlaufsplan Master in Sustainable Landscape Design and Development			**12.2025**				
Modul-Nr.	**Modul**	**SWS**	**CR**	**Semester / SWS**			
				1	**2**	**3**	**4**
9811	Human-centered Open Space Planning and Design (PM)	4	5	4			
9812	Sustainable Planting Design (PM)	4	5	4			
9813	Landscape and Regional Planning in Germany (PM)	4	5	4			
9814	Quality In Detailed Design (PM)	4	5	4			
9818	Extra Muros 1 (PM)	4	4	4			
9819	Urban Landscape Project (PM)	4	6	4			
Summe Semester 1		**24**	**30**	**24**			
Summe erforderlich		**24**	**30**	**24**			
9821	Infrastructural Landscapes (EM)	4	5		4		
9822	Planning Ahead: Development through Maintenance (WPM)	4	5		4		
9823	Participatory Landscape Development and Design (WPM)	4	5		4		
9824	Sustainable Landscape Architecture (WPM)	4	5		4		
9825	International Urban Landscapes (WPM)	4	5		4		
9826	User-oriented Open Space Planning (WPM)	4	5		4		
9828	Extra Muros 2 (PM)	4	4		4		
9829	Landscape Planning and Development Project (PM)	4	6		4		
16061	Digital tools in sustainable landscape architecture & public spatial planning (WPM)	4	5		4		
XXXX	Innovative Planting Design for Sustainable Cities (WPM)	4	5		4		
Summe Semester 2		**40**	**50**		**40**		
Summe erforderlich		**24**	**30**		**24**		
9830	Internship	X	30			X	
Summe Semester 3		**X**	**30**			**X**	
Summe erforderlich		**X**	**30**			**X**	
9840	Master Thesis	X	27				X
	Master Kolloquium	X	3				X
Summe Semester 4		**X**	**30**				**X**
Summe erforderlich		**X**	**30**				**X**
Summe gesamtes Studium SLDD		**52**	**140**				
Summe erforderlich SLDD Program		**48**	**120**				

CR = Credits
SWS = Semesterwochenstunden
PM = Pflichtmodul
WPM = Wahlpflichtmodul (4 WPM müssen gewählt werden)

Anhang 2 / Attachment 2 (English)

Study Plan Master in Sustainable Landscape Design and Development				12.2025			
Modul-No.	Module	H	CR	Semester / H			
				1	2	3	4
9811	Human-centered Open Space Planning and Design (CM)	4	5	4			
9812	Sustainable Planting Design (CM)	4	5	4			
9813	Landscape and Regional Planning in Germany (CM)	4	5	4			
9814	Quality In Detailed Design (CM)	4	5	4			
9818	Extra Muros 1 (CM)	4	4	4			
9819	Urban Landscape Project (CM)	4	6	4			
Total Semester 1		**24**	**30**	**24**			
Total required		**24**	**30**	**24**			

9821	Infrastructural Landscapes (EM)	4	5		4		
9822	Planning Ahead: Development through Maintenance (EM)	4	5		4		
9823	Participatory Landscape Development and Design (EM)	4	5		4		
9824	Sustainable Landscape Architecture (EM)	4	5		4		
9825	International Urban Landscapes (EM)	4	5		4		
9826	User-oriented Open Space Planning (EM)	4	5		4		
9828	Extra Muros 2 (CM)	4	4		4		
9829	Landscape Planning and Development Project (CM)	4	6		4		
16061	Digital tools in sustainable landscape architecture & public spatial planning (EM)	4	5		4		
XXXX	Innovative Planting Design for Sustainable Cities (EM)	4	5		4		
Total Semester 2		**40**	**50**		**40**		
Total required		**24**	**30**		**24**		

9830	Internship	X	30			X	
Total Semester 3		**X**	**30**			**X**	
Total required		**X**	**30**			**X**	

9840	Master Thesis	X	27				X
	Master Colloquium/Oral Exam	X	3				X
Total Semester 4		**X**	**30**				**X**
Total required		**X**	**30**				**X**

Total of SLDD Program		**52**	**140**				
Total required for SLDD Program		**48**	**120**				

CR = Credits
H = Weekly Hours during the Semester
CM = Compulsory Module
EM = Elective Module (Students have to select and pass 4 out of 6 Elective Modules)