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CURRICULUM

für das Joint Masterstudium

„International Joint Master's Programme in Sustainable Development"

an der Karl-Franzens-Universität Graz

Der Senat hat am 25. 6. 2008 gemäß § 25 Abs. 1 Z 16 UG 2002 die von der interfakultären Curricula-Kommission Umweltsystemwissenschaften am 6. 12. 2007, 13. 3. 2008, 31. 3. 2008, 6. 5. 2008 und 19. 6. 2008 beschlossene Neuerstellung des Curriculums „International Joint Master's Programme in Sustainable Development" genehmigt.

Rechtliche Grundlagen:
Universitätsgesetz 2002, BGBl.I Nr.120/2002 idgF.
Satzungsteil Studienrechtliche Bestimmungen der Karl-Franzens-Universität Graz

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Curriculum für das „International Joint Master's Programme in Sustainable Development“

(Doppeldiplom-Programm gemäß § 51 Abs. 2 Z 27 UG 2002)

Einleitung

Seit den Weltumweltkonferenzen von Rio de Janeiro im Jahr 1992 und von Johannesburg im Jahr 2002 ist nachhaltige Entwicklung - d.h. eine Entwicklung, die der Umwelt mit Verantwortung begegnet – zu einem international anerkannten Grundsatz geworden, dessen Umsetzung sich zahlreiche Nationen verschrieben haben. Viele Wege führen dorthin, so z.B. das Recyceln von Materialien, der verantwortungsvolle Umgang mit natürlichen Ressourcen, das Entwickeln umweltbewusster Konsumationsmuster, das Wecken sozialen Verantwortungsbewusstseins in Betrieben sowie die Schwerpunktlegung auf die Qualität der gestalteten Umwelt. Nachhaltige Entwicklung ist Ausdruck des Wunsches nach einer Abstimmung der ökonomischen und sozialen Entwicklung mit den Belastbarkeitsgrenzen unserer physikalischen Umwelt, sowohl in der Gegenwart und als auch in der Zukunft.

Das Thema der nachhaltigen Entwicklung genießt hohe Priorität auf der internationalen politischen und wissenschaftlichen Tagesordnung. Es handelt sich hierbei auch um ein grenzüberschreitendes Thema, da kein Problem, das aus der Beziehung zwischen Umwelt und Entwicklung entsteht, an der Grenze eines Landes halt macht. Das Konzept der 'nachhaltigen Entwicklung' hat eine weitreichende Bedeutung. Es besteht die internationale Verpflichtung, den Nutzen ökonomischer und sozialer Entwicklung sorgfältig gegen mögliche Umweltbelastungen abzuwägen. Ein guter Weg, sich mit dieser Thematik zu beschäftigen, ist es, talentierte Studierende in einem internationalen Rahmen mit dieser Problematik zu konfrontieren. Das Joint Masterstudium in Sustainable Development bietet einen exzellenten Rahmen für Studierende, sich den Themen der Nachhaltigkeit von einer interdisziplinären Perspektive aus zu nähern. Der Schwerpunkt liegt darin, die Kompetenzen auf Fragestellungen rund um nachhaltige Entwicklung und die Bedürfnisse und Möglichkeiten des gesellschaftlichen Wandels anzuwenden. Das Studium vereint die Stärken und Spezialisierungen in Lehre und Spitzenforschung von sechs Universitäten und ermöglicht den Studierenden somit ein Studium, das in den Ländern der Konsortiumspartner anerkannt wird. Während sich die Beschäftigungsfähigkeit der Studierenden im privatwirtschaftlichen, öffentlichen und halb-öffentlichen Bereich erhöht, wird ihnen auch die Möglichkeit geboten, ein Doktoratsstudium anzuschließen.

§ 1 Allgemeine Bestimmungen

Das Curriculum für das Joint Masterstudium wurde gemeinsam von den folgenden sechs Partneruniversitäten unter der Schirmherrschaft der Karl-Franzens-Universität Graz, Österreich entwickelt: **Karl-Franzens-Universität Graz**, **Ca' Foscari Universität Venedig, Universität Leipzig**, **Universität Utrecht, Universität Basel** und **Universität Hiroshima**.

Sofern nicht andere für die Kooperationspartner verbindliche rechtliche Regelungen bestehen, gilt für dieses Curriculum das Studienrecht des Universitätsgesetzes 2002 und der an der Universität Graz gültigen Satzung.

(1) Status der Kooperationspartner

Die folgenden sechs Universitäten haben gemeinsam ein „International Joint Master's Programme in Sustainable Development“ ausgearbeitet:

- **Karl-Franzens-Universität Graz** (Österreich, koordinierende Universität), vertreten durch Ao.Univ.-Prof. Alfred Posch (akademischer Vertreter), Institut für Systemwissenschaften, Innovations- und Nachhaltigkeitsforschung, Universitätsstraße 15 G/II, A-8010 Graz,
- **Ca' Foscari Universität Venedig** (Italien), vertreten durch Prof. Gabriele Zanetto (wissenschaftlicher Vertreter), Scienze Ambientali, Dorsoduro 2137 – 30123 Venezia,
- **Universität Leipzig** (Deutschland), vertreten durch Prof. Robert Holländer (akademischer Vertreter), Wirtschaftswissenschaftliche Fakultät, Institut für Infrastruktur und Ressourcenmanagement, Marschnerstraße 31, 04109 Leipzig,
- **Universität Utrecht** (Niederlande), vertreten durch Prof.dr. Peter Driessen (wissenschaftlicher Vertreter), Direktor des Masterstudiums in „Sustainable Development", Fakultät für Erdwissenschaften, P.O. Box 80115, 3508 TC Utrecht,
- **Universität Basel** (Schweiz), vertreten durch Prof. Dr. phil. Paul Burger (akademischer Vertreter), Programm für Nachhaltigkeitsforschung, Philosophisch-Naturwissenschaftliche Fakultät, Klingelbergstraße 50, CH-4056 Basel,
- **Universität Hiroshima** (Japan), vertreten durch Prof. Takao Yamashita (wissenschaftlicher Vertreter), Graduate School for International Development and Cooperation, 1-5-1 Kagamiyama, Higashi-Hiroshima, 739-8529.

(1.1) Konsortium

Von den sechs Partneruniversitäten, die das Studium entwickeln, bilden die folgenden vier Universitäten das „Konsortium":

- **Karl-Franzens-Universität Graz** (Österreich), rechtliche Vertreterin: Ao. Univ.-Prof. Dr. Roberta Maierhofer, Vizerektorin für Internationale Beziehungen und überfakultäre Angelegenheiten,
- **Ca' Foscari Universität Venedig** (Italien), rechtlicher Vertreter: Prof. Pier Francesco Ghetti, Rektor,
- **Universität Leipzig** (Deutschland), rechtlicher Vertreter: Prof. Dr. iur. Franz Häuser, Rektor.
- **Universität Utrecht** (Niederlande), rechtliche Vertreterin: Yvonne C.M.T. van Rooy, LLM, Rektorin.

Diese vier Universitäten verleihen gemeinsam ein Joint Degree als gemeinsamen, in den betreffenden Staaten anerkannten Mastergrad.

Die mit diesen Graden verbundenen Rechte haben in allen beteiligten Staaten Gültigkeit.

(Vergleiche Kooperationsvertrag, § 2)

(1.2) Mobilitätspartner

Die folgenden Universitäten sind Mobilitätspartner:

- **Universität Basel** (Schweiz), rechtlicher Vertreter: Prof. Dr. phil. Ueli Mäder, Dekan der *Philosophisch-Historischen Fakultät*,
- **Universität Hiroshima** (Japan), rechtlicher Vertreter: Prof. Toshimasa Asahara, Rektor.

Details dazu finden sich in den Verträgen zwischen den Mobilitätsuniversitäten und dem Konsortium.

(Vergleiche Kooperationsvertrag, § 2)

(2) Ziel des „International Joint Master's Programme in Sustainable Development"

Zielsetzung des „International Joint Master's Programme in Sustainable Development" ist es, ein internationales und interdisziplinäres Joint Masterstudium von höchster Qualität anzubieten, das es den Teilnehmern bzw. Teilnehmerinnen ermöglicht, wesentlich zum Wandel der Gesellschaft in Richtung Nachhaltigkeit beizutragen. Das Joint Masterstudium legt großen Wert sowohl auf die Forschung als auch auf Interventionsstrategien, es fördert die Fähigkeit zum wissenschaftlichen

Arbeiten und besonders den methodologisch korrekten Zugang zur Problemlösung, vor allem im inter- und transdisziplinären Rahmen.

Das Joint Masterstudium bereitet die Studierenden auf ein Doktoratsstudium vor und schließlich auf Berufe in der wissenschaftlichen Forschung. Die gesellschaftliche Ausrichtung des Studiums sorgt weiters für eine gute Vorbereitung der Absolventen bzw. Absolventinnen auf Berufszweige, die nicht direkt mit wissenschaftlicher Forschung zu tun haben. Sie können Beschäftigung in der Privatwirtschaft und im öffentlichen Raum finden (EU, nationale, regionale und lokale Regierungsebene) so wie in Beratungsfirmen und bei NGOs. Im Zuge ihrer beruflichen Laufbahn sollen die Absolventen bzw. Absolventinnen imstande sein, leitende Positionen einzunehmen, besonders in Hinblick auf die Integration von Wissen und Methodik und im Bereich des Change Management (hier speziell bei komplexen Prozessabläufen im gesellschaftlichen Wandel).

(2.1) Bildungsziele:

Gemäß den Dublin Descriptors wird der Mastergrad an Studierende verliehen, die

- die Dynamik, Komplexität und Wechselwirkung zwischen natürlichen, sozialen und ökonomischen Prozessen und Systemen in Hinblick auf nachhaltige Entwicklung verstehen
- imstande sind, Themen aus dem Bereich nachhaltige Entwicklung von einer multidisziplinären Perspektive aus zu analysieren
- über umfassende wissenschaftliche Kompetenzen verfügen
- mit genügend Arbeitsmethoden und –instrumenten vertraut sind und diese in der wissenschaftlichen Forschung und Anwendung einsetzen können
- in der Lage sind, ihr Wissen und ihre wissenschaftlichen Fähigkeiten in inter- und transdisziplinären Teams auf komplexe Themenbereiche anzuwenden, die die nötigen sozialen Kompetenzen aufweisen (z.B. Schreiben, Diskutieren, Konfliktmanagement, Teamwork, Projektmanagement) und daher imstande sind, einen beträchtlichen Beitrag zum Wandel in Richtung nachhaltige Gesellschaft zu leisten
- selbstständig wissenschaftlich forschen und die Ergebnisse einer wissenschaftlichen Untersuchung in die Form eines wissenschaftlichen Artikels oder einer ähnlichen Publikation bringen können.

(2.2) Wissenschaftliche Perspektiven

Von den Partneruniversitäten werden verschiedene Spezialisierungen angeboten. Innerhalb jedes einzelnen dieser Module hängen die Schwerpunktsetzung und damit die mögliche Spezialisierung der Studierenden von deren individueller Bachelorausbildung ab (siehe Modulbeschreibungen in Anhang 1).

(2.3) Berufsfelder: Relevanz des Studiums für Arbeitsmarkt und weiterführende Studien

Berufsfelder, für die Kompetenzen entwickelt werden, hängen sehr stark von der letztlich gewählten Spezialisierung ab und schließen den akademischen, privatwirtschaftlichen, öffentlichen und halb-öffentlichen Bereich mit ein. Typische Berufsfelder für Absolventen bzw. Absolventinnen sind:

- Innovationsmanagement
- Internationale Organisationen
- Lehre, Aus- und Fortbildung
- Ökologische Geschäftsführung
- Qualitätsmanagement
- Raumordnung und Stadtplanung
- Umwelt, Gesundheit und Sicherheit
- Unternehmensberatung
- Wirtschaftsmanagement
- Wissenschaftliche Forschung

(Die oben genannten Berufsfelder wurden alphabetisch und nicht nach Prioritäten geordnet.)

(3) Dauer des Studiums

Allen von den Studierenden erbrachten Leistungen, zu denen auch der Selbststudienanteil und die Kontaktstunden zählen, werden ECTS-Anrechnungspunkte zugeteilt. Das Joint Masterstudium umfasst 120 ECTS-Anrechnungspunkte, was einer Studiendauer von vier Semestern bzw. zwei Jahren entspricht (gemäß den jeweils geltenden Bestimmungen an den Partneruniversitäten).
Mindestens 60 ECTS-Anrechnungspunkte müssen an der Universität der Zulassung absolviert werden. Mindestens 30 ECTS-Anrechnungspunkte müssen verpflichtend an einer der Partneruniversitäten erworben werden.

(4) Akademischer Grad

Studierenden, die das Joint Masterstudium „International Joint Master's Programme in Sustainable Development" abschließen, wird nach den studienrechtlichen Regelungen an der Universität der Zulassung der Mastergrad „Joint Master of Sustainable Development" verliehen, welcher in den Ländern der Partneruniversitäten als gleichwertiger Abschluss eines entsprechenden Masterstudiums gilt:

Österreich:	Master of Science	MSc
Deutschland:	Master of Science	MSc
Italien:	Laurea magistrale	LM
Niederlande:	Master of Science	MSc

Joint Degree (Graz, Venedig, Leipzig, Utrecht)
Den Studierenden wird von den Universitäten Graz, Venedig, Leipzig, Utrecht der oben angeführte Mastergrad als Joint Degree verliehen.

Joint Degree (Graz, Leipzig, Utrecht)
Den Studierenden wird von den Universitäten Graz, Leipzig, Utrecht der oben angeführte Mastergrad als Joint Degree verliehen, wenn die rechtlichen Voraussetzungen zur Erlangung des italienischen Grades nicht erfüllt sind (siehe Annex 4).

(5) Offizielle Lehrveranstaltungstypen

Darunter fallen Vorlesungen, Seminare, Tutorien, praktische Übungen und andere Lehrveranstaltungsformen, gemäß den jeweils geltenden Bestimmungen an den Partneruniversitäten.

Karl-Franzens-Universität Graz: Satzungsteil Studienrechtliche Bestimmungen §1 (3).

Ca' Foscari Universität Venedig: Ministererlass Nr. 270/2004; Satzung und Studienvorschriften der Ca' Foscari Universität.

Universität Leipzig: Gesetz über die Hochschulen im Freistaat Sachsen (*Sächsisches Hochschulgesetz – SächsHG*) vom 11. Juni 1999 (*SächsGVBl. S. 294*), §21 Studienordnungen und § 24 Prüfungsordnungen.

Universität Utrecht: Gesetz für Hochschulen und Wissenschaftliche Forschung, 1992. Richtlijn Onderwijs Universiteit Utrecht, 2006.

Universität Basel: Ordnung für das Masterstudium «Sustainable Development» an der Philosophisch-Historischen, der Philosophisch-Naturwissenschaftlichen und der Wirtschaftswissenschaftlichen Fakultät der Universität Basel. Vom Universitätsrat genehmigt am 22. September 2005.

Universität Hiroshima: School Education Law, National Standards for the Establishment of Universities, National Standards for the Establishment of Graduate Schools, Hiroshima University General Rules.

(6) Beschränkung der Plätze in Lehrveranstaltungen

Sofern aus pädagogisch-didaktischen Gründen oder aus Sicherheitsgründen die Anzahl der Teilnehmenden für die einzelnen Lehrveranstaltungstypen gemäß den jeweils geltenden Statuten/Curricula an den Partneruniversitäten beschränkt sind, sind diese Regelungen für alle Studierenden gültig.

(7) Lehr- und Lernmethoden

Zuzüglich zu den regulären Lehrveranstaltungen an den Partneruniversitäten können von den Partneruniversitäten gemeinsam vorbereitete Lehrformen (z.B. Sommer- oder Winterschulen, Intensivprogramme) für die Absolvierung des Joint Masterstudiums sowie für die Erreichung der erforderlichen 30 ECTS-Anrechnungspunkte herangezogen werden.

(8) Zielgruppe und Zulassung

Die Zielgruppe für das „International Joint Master's Programme in Sustainable Development" sind hochqualifizierte und hochmotivierte Studierende, die sich für nachhaltige Entwicklung und hier besonders für die internationale Dimension von Nachhaltigkeitsthemen interessieren. Darüber hinaus sollten sie bereit und fähig sein, komplexe Prozesse von einer interdisziplinären Perspektive aus zu analysieren und zu beurteilen.

Studierende, die sich für das Joint Masterstudium bewerben wollen, müssen sich einem Auswahlverfahren des Konsortiums unterwerfen (vergleiche Kooperationsvertrag, § 5). Die Auswahlkommission spielt hier eine entscheidende Rolle. Die Einreichfristen für das Auswahlverfahren werden jedes Jahr auf der folgenden Website veröffentlicht: www.jointdegree.eu.

Allgemeine Zulassungsvoraussetzungen
Nachhaltige Entwicklung ist ein interdisziplinäres Fachgebiet. Forschung in diesem Bereich erfordert eine interdisziplinäre Haltung. Aus diesem Grund werden für das „International Joint Master's Programme in Sustainable Development" jene Personen aufgenommen, die ein fachlich in Frage kommendes Studium im Umfang von mindestens 180 ECTS-Anrechnungspunkten abgeschlossen haben (Bachelorstudium oder anderes gleichwertiges Studium an einer anerkannten inländischen oder ausländischen postsekundären Bildungseinrichtung) und die Forschungsfähigkeiten, Basiswissen in den Sozial- und/oder Naturwissenschaften und ein allgemeines Verständnis für die Fachgebiete nachhaltige Entwicklung und Interventionsstrategien vorweisen können. Bei der Auswahl der Module sollen die Studierenden ihr Vorwissen in Hinblick auf die einzelnen Modulbeschreibungen überprüfen. Eine angemessene Vorbereitung für die naturwissenschaftlichen Module könnten z.B. Kurse aus Physik, Chemie, Geologie, Wissenschafts- und Innovationsmanagement, technische Wissenschaften, Biologie, Geographie oder Geowissenschaften beinhalten. Für die sozialwissenschaftlichen Module empfehlen sich bereits absolvierte Kurse aus Wirtschaftsmanagement, Humangeographie, Planen, Soziologie, Politikwissenschaft, Rechts- oder Wirtschaftswissenschaft.
Absolventen bzw. Absolventinnen einer anderen Studienform und -richtung können zugelassen werden, wenn das bereits absolvierte Studium im üblichen Zulassungsverfahren der jeweiligen Universität der Zulassung, an der sich der oder die Studierende bewirbt, geprüft und als äquivalent beurteilt wird.
Die Entscheidung wird hauptsächlich aufgrund der Vorbildung getroffen (die Bewerber bzw. Bewerberinnen müssen Forschungsfähigkeiten, Basiswissen in den Sozial- und/oder Naturwissenschaften und allgemeines Verständnis für die Fachgebiete nachhaltige Entwicklung und Interventionsstrategien vorweisen können), welche auch die Neben- und Wahlfächer, die persönliche Motivation, Empfehlungen ehemaliger Lehrer bzw. Lehrerinnen sowie die Englischkenntnisse der Studierenden miteinbezieht.

Englisch
Da große Teile des Studiums, und hier besonders die für das Mobilitätssemester gewählten Spezialisierungen, auf Englisch vorgetragen werden, verlangt die Auswahlkommission einen Nachweis über die Englischkenntnisse des Bewerbers bzw. der Bewerberin. Ein aktuelles *Originalzeugnis* von einem der folgenden Tests muss vorgelegt werden: IELTS (benötigte Mindestpunkteanzahl: 6,5), TOEFL (benötigte Mindestpunkteanzahl: 237 auf den Computertest, 580

auf den Papiertest, 93 auf den Internettest) oder EFL (benötigte Mindestnote: B). Bewerber bzw. Bewerberinnen mit Englisch als Muttersprache und Personen, die ein Bachelorstudium mit Unterrichtssprache Englisch erfolgreich abgeschlossen haben, müssen diese Testergebnisse nicht nachweisen.

Ergebnisse des Auswahlverfahrens
Die Entscheidung der Auswahlkommission wird dem Bewerber bzw. der Bewerberin in Briefform zugestellt. Zuerkennungsschreiben sind ein Jahr gültig. Über die Zulassung zum Joint Masterstudium entscheidet gemäß § 60 UG 2002 das Rektorat mittels Bescheid.

§ 2 Gliederung des Studiums[1]

		ECTS-Anrechnungspunkte	Sem.
Pflichtfächer	**Grundlagen in Nachhaltiger Entwicklung**	**30 ECTS**	**1**
Gebundene Wahlfächer	**Module (können aus den folgenden gewählt werden)**	**30 ECTS**	**2**
	o Climate & Environmental Change (Graz) o Energy & Resources (Utrecht) o *Env. Evaluation and Management (Venedig, nur auf Italienisch*) o Environmental Policy and Management (Utrecht) o Environmental Technology (Leipzig) o Integrated Coastal Zone Management (Venedig) o Intl. and Europ. Env. Law (Utrecht) o Land use & Biodiversity (Utrecht) o *Marine Environment (Venedig, nur auf Italienisch)* o Renewable Resources (Graz) o Resources Management (Leipzig) o Sustainability: The Social Dimension (Basel) o Sustainable Business Management (Graz) o Sust. Dev. Science & Technology (Hiroshima) o Sust. Urban & Regional Development (Graz) o *Technologies and Control of the Environment (Venedig, nur auf Italienisch)* o *Terrestrial Environment (Venedig, nur auf Italienisch)*		
Pflichtfächer und freie Wahlfächer[2]	**Integrationsmodul und weitere Spezialisierung**	**30 ECTS**	**3**
Modul Masterarbeit		**30 ECTS**	**4**
	Masterarbeit		
	Präsentation und Verteidigung[3]		
		120 ECTS	

(1) Grundlagen in Nachhaltiger Entwicklung
Siehe Tabelle in Anhang 1

(2) Module
Siehe Tabellen in Anhang 1

(3) Integrationsmodul
Siehe Tabelle in Anhang 1

[1] Siehe Anhang 1 „Modulbeschreibungen“
[2] Nähere Beschreibung siehe Anhang 1 „Modulbeschreibung Integration Module University of Graz“
[3] Gemäß § 18 Abs. 5 des Studienplans „Umweltsystemwissenschaften“ vom 1. Oktober 2007

(4) Modul Masterarbeit

Das Modul Masterarbeit umfasst 30 ECTS-Anrechnungspunkte. Die Masterarbeit dient dem Nachweis der Befähigung zum selbstständigen Studium und der Recherche und sollte auf Englisch verfasst werden. Die Arbeit muss eine kurze Zusammenfassung enthalten, die sowohl auf Englisch als auch in der Sprache der Universität der Zulassung gemäß den jeweils geltenden Statuten an den Partneruniversitäten abgefasst wird.

Die Bedeutung der Masterarbeit
Die Masterarbeit spielt eine zentrale Rolle im Joint Masterstudium und stellt den wichtigsten Teil des Studiums dar. Sie gilt als Nachweis der Befähigung, ein wissenschaftliches Thema selbstständig sowie inhaltlich und methodisch vertretbar zu bearbeiten. Die Masterarbeit bescheinigt die Qualifikation des Absolventen bzw. der Absolventin und garantiert auch, dass die letzten Leistungsanforderungen des Masterstudiums erfüllt wurden.
Die Masterarbeit stellt ein wichtiges Training dar. Sie bezieht eine große Anzahl an akademischen Aktivitäten mit ein: die Formulierung eines Forschungsziels und einer Forschungsfrage nach erfolgtem Studium der Literatur; das Aussortieren, Interpretieren und Verknüpfen von Informationen; das Sammeln und Analysieren von Maßnahmen und Beobachtungen; das Präsentieren von mündlichen/schriftlichen Ergebnisberichten.

Das Thema der Masterarbeit
Den Studierenden wird empfohlen, das Thema ihrer Masterarbeit nach Absprache mit einem Betreuer bzw. einer Betreuerin am Beginn des dritten Semesters festzulegen. Sie reichen dazu einen schriftlichen Vorschlag ein (inklusive Problembeschreibung, Forschungsziele und –fragen, Forschungsmethoden, theoretische Perspektive, erwartete Ergebnisse, Zeitplan, Bibliographie), der vom Betreuer bzw. der Betreuerin und einem Zweitleser bzw. einer Zweitleserin angenommen werden muss (Mitglied des Lehrkörpers an einer Partneruniversität, welches vom Betreuer bzw. der Betreuerin vorgeschlagen wird).
Die Annahme des Themas erfolgt gemäß § 26 Abs. 5 Satzungsteil Studienrechtliche Bestimmung der Universität Graz durch das studienrechtliche Organ.
Gemäß § 81 Abs. 2 UG 2002 muss die Bearbeitung des Themas binnen 6 Monaten möglich und zumutbar sein.

Praxis
Normalerweise findet ein Forschungsprojekt an einer der Partneruniversitäten oder an einem anderen Forschungsinstitut statt. Weiters bekommen die Studierenden die Möglichkeit, ihre Forschungen für die Masterarbeit während einer Praxis durchzuführen, so zum Beispiel bei Regierungsorganisationen, Forschungsinstitutionen, Beratungsfirmen, NGOs oder anderen Firmen.
Zu Beginn der Praxis werden die Vorbedingungen und der Inhalt der Praxis in einem Praxisvertrag festgelegt. Diesen Vereinbarungen stimmt der/die Studierende, der Betreuer bzw. die Betreuerin (jene Person, die auch die Masterarbeit fachlich betreuen wird) sowie der Gastmentor bzw. die Gastmentorin zu (jene Person der Praxisinstitution, die den/die Studierende/n betreut). Damit soll sicher gestellt werden, dass die Praxis zu einer sinnvollen und angenehmen Erfahrung für alle Beteiligten wird. Die gegenseitigen Rechten und Pflichten werden in einem Praxisvertrag geregelt. Jegliche Vereinbarungen zwischen den Studierenden und der Praxisinstitution müssen im Voraus vom Betreuer bzw. der Betreuerin der Masterarbeit angenommen werden.
Die Studierenden, die eine Praxis absolvieren, werden von Bediensteten sowohl der Partneruniversitäten als auch der Gastinstitution betreut. Letztere stellt zu diesem Zweck einen Mentor bzw. eine Mentorin für die Praxis zur Verfügung. Diese Person ist hauptsächlich mit der täglichen Betreuung (der bzw. die Studierende wird mit der Institution, ihren Arbeitsmethoden, Zielen und dem Arbeitsumfeld vertraut gemacht) und der Betreuung auf persönlicher Ebene befasst (Coaching). Die Hauptaufgabe des Universitätspersonals ist es, die wissenschaftlichen Aspekte der Forschungsarbeiten zu überwachen (Ziele, Forschungsfragen, Methoden, Inhalt sowie theoretische Aspekte).
Der Wert einer Masterarbeit, die im Zuge einer Forschungspraxis entstanden ist, unterscheidet sich nicht vom Wert einer ‘normalen’ Masterarbeit und muss dieselben Qualitätskriterien erfüllen.

Beurteilung

Die Regeln zur Beurteilung der Masterarbeit sind in den studienrechtlichen Bestimmungen für das Masterstudium festgelegt. Die fertige Masterarbeit wird von mindestens zwei Mitgliedern des Lehrkörpers bewertet: vom Betreuer bzw. der Betreuerin und einem Zweitleser bzw. einer Zweitleserin (Mitglied des Lehrköpers an einer Partneruniversität, welches vom Betreuer bzw. der Betreuerin gewählt wird). Die Beurteilung eines etwaigen anderen (externen) Betreuers oder einer etwaigen anderen (externen) Betreuerin wird berücksichtigt. Wurde eine Praxis absolviert, so berät sich der Betreuer bzw. die Betreuerin an der Universität mit dem Mentor bzw. der Mentorin für die Praxis über die Qualität der Arbeit, die an der Gastinstitution geleistet wurde.

Sollten die Betreuer bzw. Betreuerinnen und der Zweitleser bzw. die Zweitleserin sich nicht auf eine Endnote einigen können oder sollte der/die Studierende deren Entscheidung anfechten, so obliegt die endgültige Bewertung dem Allgemeinen Programmausschuss. Der Ausschuss trifft eine verbindliche Entscheidung über die Endbewertung der Masterarbeit.

Besteht der/die Studierende nicht, so hat er bzw. sie das Masterarbeit-Modul noch einmal zu beginnen.

§ 3 Beurteilung

Beurteilungsarten, -verfahren und -methoden

Die Leistung der Studierenden wird anhand verschiedener Methoden beurteilt, darunter fallen Prüfungen und schriftliche Arbeiten gemäß den jeweils geltenden Statuten an den Partneruniversitäten. Die Studierenden müssen zu Kursbeginn im Semesterlehrplan über die Beurteilungskriterien informiert werden.

Notensysteme

Jede Universität verwendet das Notensystem gemäß den relevanten rechtlichen Bestimmungen. Eine Umrechnungstabelle wird zur Verfügung gestellt (Anhang 2).
Alle Konsortiumspartner stellen den Studierenden am Ende ihres Studiums einen Notendurchschnitt (in Punkten) aus.

Evaluierung und Qualitätssicherung

Zum Zwecke der Qualitätssicherung in allen Bereichen des Studiums werden Konsortiumsmitglieder aller Universitäten in regelmäßigen Abständen gebeten, Proben von Lehrplänen und Arbeiten von Studierenden aller Konsortiumsuniversitäten zu kontrollieren und zu prüfen. Dies ist einer der Tagespunkte beim jährlichen Repräsentantentreffen. Der Allgemeine Programmausschuss trägt die Verantwortung für die Gesamtleitung des Studiums und dessen Qualitätssicherung. Die Ergebnisse der Qualitätssicherungsmaßnahmen müssen ein Mal pro Jahr vom Allgemeinen Programmausschuss diskutiert werden. (Vergleiche Anhang 3 für die Qualitätssicherungsmaßnahmen aller Partneruniversitäten.)
Die Kursevaluierungen konzentrieren sich auf die Ziele, Inhalte, didaktische Aufbereitung und Prüfungen.

§ 4 Verpflichtender Auslandsaufenthalt

Gemäß § 37 Satzungsteil Studienrechtliche Bestimmungen der Universität Graz ist ein Auslandsaufenthalt an einer der Partnerinstitutionen gemäß § 1 Abs. 1 des Curriculums im Ausmaß von mind. 30 ECTS-Anrechnungspunkten verpflichtend.
Den Studierenden wird geraten, die Spezialisierung des 2. Semesters an einer Partneruniversität zu absolvieren, wenn alle Partneruniversitäten zumindest ein Modul auf Englisch anbieten. Die Studierenden können sich auch für einen Auslandsaufenthalt im 3. oder 4. Semester bewerben, wobei es hier keine Garantie für ein englisches Modulangebot gibt. Bei ihrer Bewerbung müssen die Studierenden eine Prioritätenliste ihrer Spezialisierungen einreichen. Falls die Spezialisierung im 2. Semester an der Universität der Zulassung stattfindet, müssen die Studierenden angeben, wo sie ihr

verpflichtendes Auslandssemester (3. oder 4. Semester) verbringen wollen und diese Wahl auch begründen.
Der Allgemeine Programmausschuss teilt die Studienplätze nach Verfügbarkeit freier Plätze zu.

Es wird vorausgesetzt, dass die allgemeinen und besonderen Aufnahmebedingungen für das Universitätsstudium mit Zeitpunkt der Nominierung durch die Universität der Zulassung erfüllt sind.

§ 5 Zusätzliches Auslandssemester

Studierende können an allen Partneruniversitäten ein zusätzliches Auslandssemester absolvieren, entweder als ordentliche Studierende für ein Semester oder für einen kurzen Forschungsaufenthalt. Finanzielle Zuschüsse können über die bestehenden Mobilitätsprogramme und Stipendien beantragt werden. Die Mittel hierfür sind jedoch beschränkt.

§ 6 Inkrafttreten des Curriculums

Das vorliegende Curriculum tritt an den sechs oben genannten Partneruniversitäten nach Genehmigung durch die jeweiligen zuständigen Instanzen und rechtsgültiger Verlautbarung mit Beginn des akademischen Jahres 2008/09 in Kraft.

Title	**Basics in Sustainable Development (30 ECTS)**
University offering the module	**University of Graz / Austria**
Learning Objectives	After having taken this module, students will: • have obtained a good overview of the concept of sustainable development from local to global processes and its history and of various ways to operationalize it; • are capable to recognize key sustainable development issues and make an integral and critical assessment of available options • have obtained knowledge of and skills in policy analysis and policy evaluation have obtained basic knowledge in different relevant scientific disciplines like chemistry, biology, geology, ecology; understand their contributions to the field of sustainable development; and possess the ability to integrate these;
List of courses offered under the header of "Basics in SD" per university	Environment and Sustainable Development (3 ECTS, 2 ch) Environmental Policy (3 ECTS, 2 ch) Chemistry*: a) General Chemistry I (3 ECTS, 2 ch) and: General Chemistry II (3 ECTS, 2 ch) or b) advanced: Pharmacognosy (6 ECTS, 4 ch) Biology*: a): Introduction into biology (6 ECTS, 4 ch) or b) Zoology – behaviour, neuro- sense physiology (4 ECTS, 3 ch) and: Bio- and genetic engineering in plants and fungi (2 ECTS, 1 ch) Geo Sciences*: a) Introduction to Physical Geography (6 ECTS, 4 ch) or: b) Development of Litho- and Biosphere (6 ECTS, 4 ch) Ecology*: Molecular ecology of micro organisms (2 ECTS, 1.5 ch) Eco-physiology of animals (2 ECTS, 1 ch) a) General ecology for environmental systems sciences (2 ECTS, 2 ch) or: b) Terrestic large scale eco-systems (2 ECTS, 2 ch) ***** In case students have already had classes in their prior education in the specific field at a comparable level, they are requested to select more sophisticated classes appropriate to their prior knowledge. The proposed classes need to be approved in advance by the curriculum commission.
Teaching Methods	primarily lectures and discussions
Modes of Assessment	primarily written exams, some individual assignments
Presumed prior knowledge	-
Offered in (winter/summer semester)	each winter semester

ch-contact hours

Title	**Basics in Sustainable Development (30 ECTS)**
University offering the module	**Ca'Foscari University Venice / Italy**
Learning Objectives	After having taken this module, students will have obtained: • A clear overview of the concept of sustainable development and its history; • A basic understanding of the dynamics, complexity and interaction between natural, social and economic processes and systems in regard of sustainable development on different scales • A understanding of the contributions from the social, economic and natural scientific disciplines; • The capability to recognize key sustainable development issues • Knowledge of and insights into governance of sustainable development • Knowledge of policy analysis and policy evaluation
List of courses offered under the header of "Basics in SD" per university	Science of complexity: mathematics (6 ECTS) Evaluation and management of sustainability (6 ECTS) Climatology and meteorology (6 ECTS) Environmental application of GIS (6 ECTS) Environmental Management Systems and Environmental Impact Assessment I (6 ECTS)
Teaching Methods	Lectures Tutorials software packages in computer laboratory Group projects, carried out by small groups.
Modes of Assessment	Individual and group assessment during the course or written/oral exam at the end of the course.
Presumed prior knowledge	1) Basic knowledge of calculus 2) None 3) Elementary knowledge of geology 4) None 5) None
Offered in (winter/summer semester)	Semester 1 Periods/Slots as indicated in detailed description: September/December

Title	**Basics in Sustainable Development (30 ECTS)**
University offering the module	**Leipzig University / Germany**
Learning Objectives	After having taken this module, students will have obtained: • A clear overview of the concept of sustainable development and its history; • A basic understanding of the dynamics, complexity and interaction between natural, social and economic processes and systems in regard of sustainable development on different scales • A understanding of the contributions from the social, economic and natural scientific disciplines; • The capability to recognize key sustainable development issues • Knowledge of and insights into governance of sustainable development • Knowledge of policy analysis and policy evaluation
List of courses offered under the header of "Basics in SD" per university	The block aims to create a common knowledge basis among the students in the field of sustainable development for the following tracks and modules by providing the students modules in the economic, social and environmental dimensions of sustainability. In accordance with their disciplinary backgrounds the students select two modules (10 + 10 CP) in dimensions complementary to their prior knowledge in order to achieve a fundamental theoretical and methodological understanding in all dimensions of sustainability and of the interdependencies between them. The selected modules have to be approved by the programme coordinator. Due to the non-consecutive and interdisciplinary character of the programme the alignment of the knowledge standards is of particular importance. In addition to the basics in economic, social and natural sciences the students gain competence in the governance of sustainable development from local to global levels including policy analysis (10 ECTS). The students have to choose two of the following modules: o Basics in economic sciences (10 ECTS) o Basics in social sciences (10 ECTS) o Basics in natural sciences (10 ECTS) Obligatory for all students: o Governance of sustainable development (10 ECTS)
Teaching Methods	▪ Lectures ▪ Tutorials ▪ Seminars ▪ Discussions ▪ Excursions
Modes of Assessment	In accordance with the respective module descriptions the performance of students will be assessed based on: ▪ Written or oral exams in the end of a course ▪ Seminar papers ▪ Individual assignments
Presumed prior knowledge	None for the modules. The presumed prior knowledge for few restricted elective courses included in the modules is defined in the module descriptions and respective study regulations.

Offered in (winter/summer semester)	Semester 1 Each winter semester

Title	**Basics in Sustainable Development (30 ECTS)**
University offering the module	**Utrecht University / The Netherlands**
Learning Objectives	After having taken this module, students: • Are able to analyse the issue of sustainable development from a natural science and social science perspective, • Have obtained a good overview of the concept of sustainable development from local to global processes and its history and of various ways to operationalize it • Are capable to recognize key sustainable development issues and make an integral and critical assessment of available options • Have obtained a good overview of the main debates on governance for sustainable development • Are able to engage in a scientific debate on the issue of sustainable development • Have obtained knowledge of and skills in policy analysis and policy evaluation
Courses	• Sustainable Development; An Integrated Systems Approach (7,5 ECTS) • The Sustainability Challenge A (7,5 ECTS) • Development Theories (7,5 ECTS) • One of the following courses: - The Sustainability Challenge B (7,5 ECTS) - Energy Conversion and Technologies (7,5 ECTS) - Themes in Land Use and Biodiversity (7,5 ECTS)
Teaching Methods	▪ Lectures ▪ Tutorials ▪ Practical training ▪ Simulation games ▪ Assignments
Modes of Assessment	▪ Written and oral exams ▪ Individual and group assignments ▪ Papers and reports ▪ Presentations ▪ Process evaluation
Presumed prior knowledge	A bachelor's degree or equivalent in one of the natural or social sciences
Offered in (winter/summer semester)	Semester 1 Each winter semester

Title of Track	**Climate and Environmental Change (CEC) (30 ECTS)**
University offering the track	**University of Graz / Austria**
Learning Objectives	After having taken this track, students will - have depth knowledge in "Climate and Environmental Change" - have the qualification to obtain, analyse, interpret and evaluate geo-spatial climatic and environmental phenomena with respect to the cause, processes, structures and future developments, - possess an understanding of the coherences of the different factors which influence the processes of climate and environmental change, - have deep knowledge in climatology and environmental basics and theories, - are able to solve scientific tasks within an interdisciplinary approach, - succeed in self-contained scientific elaborations of defined themes in the field of environmental and climate research
Courses	1. Special Climate Geography (4 ECTS, 2 ch) 2. Geographic Seminar (Physical Geography or Climatology) (6 ECTS, 2 ch) 3. Selected Topics of Environmental Physics/Meteorology and Physical Climatology (8 ECTS, 4 ch) 4. Selected Topics of Physical Geography/Landscape Ecology (8 ECTS, 4 ch) 5. Changing Landscapes and/or Geo-Spatial-Technologies (4 ECTS, 2 ch)
	Lectures will offer a comprehensive content in regard to climate and environmental change. The know-how transfers results from lecturing. Discussions and questions during the lecture are possible and even desired. In seminars (SE) an individual paper on a given research question and its presentation will be assessed. In practical lessons (PK, UE) theories, methods and tools will be trained within an applied student project.
Modes of Assessment	Lectures will have an oral or a written exam. Seminars will have an overall assessment in terms of a course with continuous class participation based on talk (technical and formal coping), discussion agility, written form (abstract and discussion record). Practical lessons will be evaluated with individual or group oral and written reports. Excursions (EX) include scientific approaches in the field to clarify and deepen indoor lesson knowledge and will be evaluated with oral examinations or written reports.
Presumed prior knowledge	Students that choose this track should possess some basic understanding of the approaches, methods and tools of "climate and natural environment".
Offered in (winter/summer semester)	SS 09 and following.

ch – contact hour

Title of Track	**Energy & Resources (30 ECTS)**
University offering the track	**Utrecht University / The Netherlands**
Short description	Well-functioning energy and material systems are critical for the functioning of society. Due to the ongoing growth of the population and the economy, various resources such as energy and water are becoming increasingly scarce. As a result of scarcity, political tensions rise and there is heightened concern about supply security. In addition, market liberalization is having a strong influence on the energy sector. However, the predominant challenge to energy and material systems is how to attain sustainability. The problem of climate change has been added to the list of existing problems; these include resource depletion; local air quality in many cities of the world; acidification; and large-scale hazards. One way to pursue sustainable development is by using renewable energy and materials; another way is by making more efficient use of energy and materials. These two topics are core elements of the research program at the Copernicus Institute. Research on life-cycle energy assessment took off in the 1970s. Since then, this field has been enriched with various methods to analyze complex energy and materials systems, to determine the potential of technological options, and to analyze the impact of energy policies. Life-cycle assessment is now widely accepted as a method to measure environmental impacts. Some of the main challenges lying ahead are the following: the analysis of energy and material systems on a continental and global scale; the quantitative impact of energy and resource policies; and the analysis of long-term transitions and the associated social changes.
Learning Objectives	The graduates are able to: ▪ build on a thorough (natural-science based) knowledge of how society uses and produces energy and materials and of the consequences for people, the economy, the environment, and future generations, ▪ approach issues of energy and materials from an interdisciplinary angle, bringing in elements of natural science, social science, and economics, ▪ conduct independent research on energy and material systems at various scales (micro, regional, national, and international), ▪ design strategies to make energy and material systems sustainable and to place those solutions in a natural-science and societal context.
Courses	▪ Energy Modelling and Economics (7,5 ECTS) ▪ Research Methods E&R (7,5 ECTS) ▪ Research Project E&R (15 ECTS)
Teaching Methods	▪ Lectures ▪ Tutorials ▪ Projects ▪ Practical training ▪ Simulation games ▪ Assignments
Modes of Assessment	▪ Written and oral exams ▪ Individual and group assignments ▪ Papers and reports ▪ Presentations ▪ Process evaluation

Presumed prior knowledge	A bachelor degree in Environmental Sciences, Chemistry, Physics of Earth Sciences proving: ▪ Sufficient and relevant knowledge, insights and skills in the field of science ▪ general insights in the problems of sustainable development ▪ some basic insights into energy streams in society and energy problems
Offered in (winter/summer semester)	Semester 2

Title of Track	**Environmental evaluation and management (30 ECTS)**
University offering the track	**Ca' Foscari University Venice / Italy**
Learning Objectives	The main learning objectives are: o To develop the ability of thinking at a system scale, by analysing and evaluating the relationships between economics tools, technologies, planning and legal instruments in the improvement of environmental quality. o On the basis of the above objective, to contribute to the definition of appropriate policies, actions, and initiatives to improve the environmental quality. o To develop the capability to operate in the market of environmental services.
Courses	Valutazione e gestione della sostenibilità ambientale I: concetti e metodi (6 ECTS) Valutazione e gestione della sostenibilità ambientale II: strumenti (6 ECTS) Matodi quantitativi per la valutazione ambientale I: modelli statistici (6 ECTS) Metodi quantitativi per la valutazione ambientale II: modelli dinamici (6 ECTS) Analisi economica del territorio e valutazione ambientale (12 ECTS) Ecotossicologia (6 ECTS)
Teaching Methods	Lectures. Tutorials. Computer hands-on session. Group exercise, performed in small groups.
Modes of Assessment	Individual and group assessments during the course or written/oral exam at the end of the course
Presumed prior knowledge	Basic elements of calculus, chemistry, geology and ecology
Offered in (winter/summer semester)	5 course of 7 in the period February / June. To be defined yet.

Title of Track	**Environmental Policy & Management (30 ECTS)**
University offering the track	**Utrecht University / The Netherlands**
Short description	Environmental Policy & Management is a track for social-science graduates. The courses are focused on the scientific analysis of the complex changes accompanying the pursuit of a sustainable society. The curriculum is rooted in the social sciences, combining knowledge from policy science, sociology, law, urban planning, human geography, and institutional economics. Particular attention is devoted to governance for sustainable development. 'Governance' means the ability to create organizational, procedural, and moral frameworks that allow the parties involved (the state, business, and civil society) to move forward on issues of sustainability. Students are trained to analyze such processes of change by applying relevant social-science theories. The track is closely linked to ongoing research at the Copernicus Institute. The central research question is how (new) societal arrangements influence social activities, processes, and structures that could make sustainable development more feasible. Governance refers to a specific process or style of governing in which the point of departure is a plurality of governing actors and a blurring of the lines that separate the public from the private actors. Governing refers to regulatory styles of steering; governance, in contrast, refers to steering in new social arrangements. Sustainable development implies a need for the organization of cooperative learning processes among the representatives of the state, the market, and civil society. Through deliberations, organized discourse, and the introduction of new arrangements for collaboration, the participants opt to define a common ground for action and eventually share their specific problem-solving capacities.
Learning Objectives	The graduates are able to: ▪ analyse and explain sustainability issues in the context of social, economic, cultural, and political processes – issues such as the internationalization of politics and the economy, the changing relations between the state, the market, and civil society, the unequal distribution of wealth, and the individualization of social life, ▪ integrate insights and approaches drawn from different social science disciplines in the framework of an analysis of sustainability issues and to design policy aimed at sustainable development, ▪ analyse the policy that has been enforced thus far on sustainable development (that is, analyse policy in the form of deliberate intervention strategies that are targeted towards social change at the micro, meso, and macro level), and to evaluate that policy in terms of various criteria derived from environmental and policy science (such as efficiency, effectiveness, equity, contingency, legitimacy), ▪ design new strategies for intervention to promote sustainable development, and to supervise and evaluate them; in particular, to be familiar with methods of interactive policy implementation, ▪ develop and carry out scientific research in an independent and creative way with respect to the societal aspects of sustainability issues and the solutions that can be reached

	through policy.
Courses	▪ Policy Analysis for Sustainable Development(7,5 ECTS) ▪ International Environmental Governance (7,5 ECTS) ▪ Interactive Planning of Sustainability (7,5 ECTS) ▪ Research Methodology Planning and Management (7,5 ECTS)
Teaching Methods	▪ Lectures ▪ Tutorials ▪ Practical training ▪ Simulation games ▪ Assignments
Modes of Assessment	▪ Written and oral exams ▪ Individual and group assignments ▪ Papers and reports ▪ Presentations ▪ Process evaluation
Presumed prior knowledge	A bachelor degree in Environmental Studies, Environmental Sciences, Innovation Management, Human Geography and Planning, Sociology, Public Administration, Law or Economics proving: ▪ sufficient and relevant knowledge, insights and skills in the field of social sciences and ▪ general insights in the problems of sustainable development
Offered in (winter/summer semester)	Semester 2

Title of Track	**Environmental Technology (30 ECTS)**
University offering the track	**Leipzig University / Germany**
Learning Objectives	The track aims to develop a fundamental understanding of the end-of-pipe and cleaner production technologies for pollution prevention and reduction and of the municipal environmental infrastructure. First, primary environmental pollutants, their dispersion and effect mechanisms in the environment as well as the basics in sampling and analyses will be outlined. Second, the technologies for air pollution abatement and safety engineering are presented. Subsequently, attention is given to industrial applications for water and wastewater treatment as well as waste recycling and treatment. The last part of the track concentrates on the provision and operation of municipal environmental infrastructures including water networks, sewage systems and energy production and supply networks. Besides the technical aspects legal requirements applying to these supply and treatment technologies are presented. The theoretical knowledge provided in the lectures will be deepened by means of application oriented seminars and excursions. After the completion of this track the students will possess competences and skills to operate and evaluate technological and infrastructural solutions for environmental protection at the firm and municipal levels.
Courses	1. Air pollution technology and safety engineering (10 ECTS) 2. Water, wastewater and waste treatment (10 ECTS) 3. Municipal infrastructure: provision and operation (10 ECTS)
Teaching Methods	Methods used in each course comprise: ▪ Lectures ▪ Excursions ▪ Seminar in the form of group or individual assignment ▪ Self-study
Modes of Assessment	In each course the performance of students will be assessed based on: ▪ A seminar paper (individually or in a team) ▪ A presentation of the seminar results (individually or in a team) ▪ An exam covering the whole content of each course (written or oral)
Presumed prior knowledge	Students that take this track should possess basic knowledge in and understanding of technology and environmental sciences including chemistry and physics as well as of the concept of sustainable development.
Offered in (winter/summer semester)	Each summer semester

Title of Track	**Integrated Coastal Zone Management (30 ECTS)**
University offering the track	**Ca' Foscari University Venice / Italy**
Learning Objectives	The main learning objectives are: To develop the ability of thinking at a system scale; To achieve a clear understanding of the key physical, chemical and biological processes which govern the environmental dynamics in coastal zones. To gain a comprehensive view of the impacts of human activities on coastal ecosystems, in order to be able to frame management problems within appropriate conceptual models, such as DPSIR (Drivers –Pressure-State-Impact-Responses). To identify key issues, such as the main conflicts among users of the coastal zone, and select appropriate policies for the sustainable development of the main economic activities.
Courses	Integrated Coastal Zone Management: introduction and social and economical issues (12 ECTS) Coastal geomorphology (6 ECTS) Marine chemistry and pollution control (6 ECTS) Sustainable use of biotic resources (6 ECTS)
Teaching Methods	Lectures. Tutorials. Computer hands-on session. Group exercise, performed in small groups.
Modes of Assessment	Individual and group assessments during the course or written/oral exam at the end of the course
Presumed prior knowledge	Basic elements of calculus, chemistry, geology and ecology
Offered in (winter/summer semester)	February/ June

Title of Track	**International & European Environmental Law (30 ECTS)**
University offering the track	**Utrecht University / The Netherlands**
Short description	The track International and European Environmental Law integrates a legal and social science approach on the management of a sustainable development. Students will learn to critically analyse and evaluate the, sometimes limited, usefulness of international and European law as steering-instrument. They will also learn about how the international, European and national legal systems interrelate. They will do this from a multidisciplinary perspective, combining approaches from law, policy studies and ecology. You will explore to what extent law serves, but sometimes even hinders environmental policy. Particular attention will be paid to the legal instruments on all levels protecting the world against the results of climate change. The track is for environmental science graduates interested in environmental legal issues and all law graduates interested in the environment.
Learning Objectives	The graduates are able to: ▪ analyse and explicitly state the possibilities and restrictions of the diverse international and European legal instruments related to sustainability issues; ▪ explain the relationship between legal and other social instruments and integrate legal and other social instruments into an analytical framework for a policy focused on sustainable development; ▪ develop strategies for contributing international and European legal instruments to solve certain environmental problems, also in relation to other social instruments; ▪ design and carry out creative and innovative research on subjects
Courses	▪ European Environmental Law (7,5 ECTS) ▪ International Environmental Governance (7,5 ECTS) ▪ International Environmental Law (7,5 ECTS) ▪ Climate Change and Law (7,5 ECTS)
Teaching Methods	▪ Lectures ▪ Seminars ▪ Tutorials ▪ Practical training ▪ Simulation games ▪ Assignments
Modes of Assessment	▪ Written and oral exams ▪ Individual and group assignments ▪ Papers and reports ▪ Presentations ▪ Process evaluation
Presumed prior knowledge	A bachelor degree in Law, Public Administration, Sociology, Planning or Environmental Studies proving: ▪ sufficient and relevant knowledge, insights and skills in the field of social sciences and law ▪ general insights in the problems of sustainable development
Offered in (winter/summer semester)	Semester 2

Title of Track	**Land Use, Environment & Biodiversity (30 ECTS)**
University offering the track	**Utrecht University / The Netherlands**
Short description	The track Land Use, Environment & Biodiversity is a multi-disciplinary natural-science program concerned with the interaction between land use and the quality of the physical and biotic environment. The multi-disciplinary character shows up as the integration of knowledge from the fields of physical geography, hydrology, soil science, landscape ecology, mathematics, physics, and chemistry. At the start of the program, students will analyze the primary drivers of changes in land use. They will analyze how such change affects physical/chemical processes in the soil, water, and atmosphere. Thus, they will study the consequences for environmental processes such as climate change, environmental pollution, and fragmentation. They will gain insight in how these environmental processes affect the quality and functioning of ecosystems and biodiversity. They will also consider interventions designed to counteract these adverse effects. In this phase, students are trained to analyze the interrelationships between land use, environment, and biodiversity. They are taught to formulate research questions and hypotheses on the basis of scientific literature. They also practice scientific communication skills by making an oral report, presenting a poster, and serving as a discussant. Students will also learn to develop and apply mathematical and simulation models. Modeling has become one of the most important tools for analyzing environmental and ecosystem processes, for determining the causes of deterioration, and for simulating the effects of intervention strategies. In preparation for their master's thesis, the students will also take a course in which a full research cycle is addressed on a specific subject. This will includes the analysis of a problem, the statement of a research problematic and derivation of hypotheses, the acquisition and analysis of data, and the formulation of conclusions, culminating in a discussion of the findings.
Learning Objectives	***The graduates:*** ▪ have insight in processes determining the interrelations between land use, environment, and biodiversity, ▪ have insight in recent theories and developments in scientific research concerning land use, environment, and biodiversity, ▪ are familiar with a number of important research methods, including methods to investigate effects of land use on environment and biodiversity, to model processes in ecosystems, and to evaluate the sustainability of scenarios for future land use, ▪ are able to identify scientific problems related to developments in society and to translate them into a research design, ▪ are able to conduct research in an independent and creative manner on a sustainable relation between land use and the quality of the environment and ecosystems.

Courses	▪ Ecosystem Modelling (7,5 ECTS) ▪ Environmental Geochemistry (7,5 ECTS) or Coastal and River Modelling (7,5 ECTS) or elective (7,5 ECTS) ▪ Research Project LEB (15 ECTS)
Teaching Methods	▪ Lectures ▪ Tutorials ▪ Practical training ▪ Simulation games ▪ Assignments
Modes of Assessment	▪ Written and oral exams ▪ Individual and group assignments ▪ Papers and reports ▪ Presentations ▪ Co-references ▪ Process evaluation
Presumed prior knowledge	A bachelor degree in Environmental Sciences, Chemistry, Biology, Physics, Innovation Management or Earth Sciences proving: ▪ sufficient and relevant knowledge, insights and skills in the field of science and ▪ general insights in the problems of sustainable development
Offered in (winter/summer semester)	Semester 2

Title of Track	**Marine and Coastal Environment (30 ECTS)**
University offering the track	**Ca' Foscari University Venice / Italy**
Learning Objectives	The main learning objectives are: o To develop the ability of thinking at a system scale; o To achieve a clear understanding of the key physical, ecological, chemical and biological processes which govern the environmental dynamics in coastal and marine areas. o To gain a comprehensive view of the impacts of human activities on coastal and marine ecosystems, in order to develop appropriate management policies and tools. o To evaluate and assess the different approaches to the sustainable management of coastal and marine resources
Courses	Biologia marina (6 ECTS) Chimica del Mare (6 ECTS) ICZM: aspetti socio-economici (6 ECTS) ICZM: gestione risorse biotiche (6 ECTS) Geomorfologia e sedimentologia dei sistemi costieri (6 ECTS) Eclologia degli ambienti di transizione (6 ECTS) Ecotossicologia (6 ECTS)
Teaching Methods	Lectures. Tutorials. Computer hands-on session. Group exercise, performed in small groups.
Modes of Assessment	Individual and group assessments during the course or written/oral exam at the end of the course
Presumed prior knowledge	Basic elements of calculus, chemistry, geology and ecology
Offered in (winter/summer semester)	5 course of 7 in the period February / June. To be defined yet

Title of Track	**Renewable Resources (30 ECTS)**
University offering the track	**University of Graz / Austria**
Learning Objectives	The module 'Renewable Resources' educates and qualifies students • in understanding as well variety and environmental background as genuine performance of renewable resources on molecular and technological level • in understanding socio-economical aspects, impacts and consequences correlated with renewable resources • in ecological footprint models and correlated sustainability concepts • by getting in touch with pilot-type and industrial technology for renewable resources • by obtaining laboratory-scale hands-on-experience working with selected renewable resources • as going-to-be experts in research oriented cooperation with local KFUG-research groups working on renewable resource topics.
Courses	**1.** Renewable Resources - Chemistry and Technology I - Basics and genuine qualities of Renewable Resources (2 ECTS, 1.33 ch) **2.** Renewable Resources - Chemistry and Technology 2 - Technological Aspects, of Renewable Resources (2 ECTS, 1.33 ch) **3.** Renewable Resources (Molecular characteristics and technological material qualities, influence of environmental and ecological conditions, optional processing approaches (2 ECTS, 2 ch) **4.** Lab Course Renewable Resources - Practical approach to selected renewable resources: - proteins / biocatalysis - oils / fats / lipids - polysaccharides - functional compounds / natural dyes (5 ECTS, 5 ch) **5.** Seminary Renewable Resources - Preparation and supporting activities to Lab Course Renewabel Resources (1 ECTS, 1 ch) **6.** Liquid Biofuels (1 ECTS, 1 ch) **7.** Biobased Compounds (1 ECTS, 0.66 ch) **8.** Polysaccharides (1 ECTS, 1 ch) **9.** Biotechnology (3 ECTS, 2 ch) **10.** Energy and Sustainable Development (4 ECTS, 2 ch) **11** Project Laboratory Renewable Resources - participating in laboratory works and research activities (8 ECTS, 8 ch)
Teaching Methods	classes, seminaries, laboratory courses, excursions; discussion in small groups;
Modes of Assessment	**lectures:** written / oral examination **seminaries:** quality of individual contribution and tasks **lab course:** quality of individual performance
Presumed prior knowledge	Bachelor in a Natural Science or Technological Discipline; evident basic education in chemistry;
Offered in (winter/summer semester)	not yet fixed, however within 1-3 semester; most lab courses will be offered as well in winter as in summer;

ch – contact hour

Title of Track	**Resources Management (30 ECTS)**
University offering the track	**Leipzig University / Germany**
Learning Objectives	The track aims to develop a comprehensive understanding of the management of natural resources including water, energy and soil and land area. First, the fundamental objectives and principles of resources management will be elaborated. Second, different legal, policy and economic instruments at the local, national and European levels for the management of natural resources will be outlined. Next, characteristic resource conflicts will be highlighted and methods and procedures for their evaluation and prognosis presented. Special attention is given to public participation. Subsequently, the appropriate decision making criteria for conflict situations will be discussed. The implementation of the theories and concepts presented in the lectures will be demonstrated by means of current best practices and the students will apply the gained knowledge in tutorials and practical seminars. After the completion of this track the students will possess competences and skills to prepare and bring about complex decisions on the management of natural resources and to communicate them.
Courses	1. Water resources management (10 ECTS) 2. Energy management (10 ECTS) 3. Soil and land area management (7 ECTS) 4. Environmental economics (3 ECTS)
Teaching Methods	▪ Courses 1 and 2: lectures, tutorials and a seminar in the form of a group or individual assignment and self-study ▪ Course 3: lectures and a seminar in the form of a group or individual assignment and self-study ▪ Course 4: lectures and self-study
Modes of Assessment	The performance of students in courses 1, 2 and 3 will be assessed based on: ▪ A seminar paper (individually or in a team) ▪ A presentation of the seminar results (individually or in a team) ▪ An exam covering the whole content of each course (written or oral) The performance of students in course 4 will be assessed based on: ▪ An exam covering the whole content of each course (written or oral)
Presumed prior knowledge	Students that take this track should possess basic knowledge in and understanding of the theories, approaches and methods of microeconomics, environmental sciences as well as of the concept of sustainable development.
Offered in (winter/summer semester)	Each summer semester

Title of Track	**Sustainability: The Social Dimension (30 ECTS)**
University offering the track	**University of Basel / Switzerland**
Learning Objectives	Students ♦ know social and societal driving forces for (un)sustainable development and conflicts arising from these; ♦ are familiar with key concepts of the societies' structurization and are able to apply them to options for action at the disposal of individual and institutional agents; ♦ know how to apply qualitative methods of analysing sustainability issues, in particular in the case of conducting evaluations and performing agent- and scenario analyses.
Courses	1. Sustainability assessment: Indicator Systems (3 or 8 ECTS) 2. Qualitative system and scenario analysis (3 or 8 ECTS) 3. Environmental ethics and intergenerational justice (3 or 8 ECTS) 4. The sustainability discourse in society (3 or 8 ECTS) 5. Actor theories (3 or 8 ECTS) 6. Social Theories (3 or 8 ECTS) 7. International resource conflicts (3 or 8 ECTS) 8. Research colloquium (1 ECTS)
Teaching Methods	Most courses offered are seminars, requiring students' active participation (presentations, case studies, discussions).
Modes of Assessment	Attending a seminar with 3 ECTS: oral presentation and written essay (15'000 signs). Attending a seminar with 8 ECTS: oral presentation with extended abstract and seminar paper (45-50'000 signs). Attending a colloquium: oral presentation.
Presumed prior knowledge	At least 20 ECTS in theories and methods of social sciences (sociology, political sciences, anthropology, etc.). Passive German language skills ("understanding") are recommended.
Offered in (winter/summer semester)	Each spring semester The courses offered may vary from one spring semester to another. Additional courses may be attended upon request and availability. Students are expected to write 3 seminar papers (hence to choose at least three courses with 8 ECTS out of seven).

Title of Track	**Sustainability: The Social Dimension (30 ECTS)**
University offering the track	**University of Basel / Switzerland**
Learning Objectives	Students ♦ know social and societal driving forces for (un)sustainable development and conflicts arising from these; ♦ are familiar with key concepts of the societies' structurization and are able to apply them to options for action at the disposal of individual and institutional agents; ♦ know how to apply qualitative methods of analysing sustainability issues, in particular in the case of conducting evaluations and performing agent- and scenario analyses.
Courses	9. Sustainable development from a social science perspective (3 ECTS) 10. Land use conflicts (3 or 8 ECTS) 11. Perspectives for a post carbon society (3 or 8 ECTS) 12. Social Change and Sustainable Development (3 ECTS) 13. Value Systems (3 or 8 ECTS) 14. Sustainability and international law (2 ECTS) 15. Optional theme (varying according to the research projects and the teaching capacity; 3 or 8 ECTS) 16. Research Colloquium (1 ECTS)
Teaching Methods	Most courses offered are seminars, requiring students' active participation (presentations, case studies, discussions).
Modes of Assessment	Attending a seminar with 3 ECTS: oral presentation and written essay (15'000 signs). Attending a seminar with 8 ECTS: oral presentation with extended abstract and seminar paper (45-50'000 signs). Attending a colloquium: oral presentation.
Presumed prior knowledge	At least 20 ECTS in theories and methods of social sciences (sociology, political sciences, anthropology, etc.). Passive German language skills ("understanding") are recommended.
Offered in (winter/summer semester)	Each autumn semester The courses offered may vary from one spring semester to another. Additional courses may be attended upon request and availability. Students are expected to write 3 seminar papers (hence to choose at least three courses with 8 ECTS out of five).

Title of Track	**Sustainable Business Management (30 ECTS)**
University offering the track	**University of Graz / Austria**
Learning Objectives	After having taken this module, students will - possess in depth knowledge in sustainable business management, with focus on environmental management systems, - gain an understanding of complex relations between economic and ecological aspects of management, - be able to develop and implement sustainability and environmental programmes in organizations - be able to critically analyse and reflect different approaches and concepts within this field - be able to apply their competences in team work and project oriented tasks, also within international settings
Courses	1. Sustainability Entrepreneurship (4 ECTS, 2 ch) 2. Integrated Management Systems (4 ECTS, 2 ch) 3. Sustainable Product Development (4 ECTS, 2 ch) 4. Eco-Controlling (4 ECTS, 2 ch) 5. Energy and Sustainable Development (4 ECTS, 2 ch) 6. Environmental-economic Practical Exercise (6 ECTS, 4 ch) 7. Seminar Sustainability and Environm. Mgt. (4 ECTS, 2 ch)
Teaching Methods	Lecture, discussions, student presentations, practical exercises, individual assignments, and group work
Modes of Assessment	In courses 1 to 5 there will be individual and/or group assignments as well as exams that cover the whole content of the course. In the environmental-economic practical exercise, group papers and presentations will build the main basis for assessment, individual assignments and small exams might be added. In the seminar, an individual paper on a given research question and its presentation will be assessed.
Presumed prior knowledge	Students that take this track should possess basic understanding of the approaches, methods and tools of business management, especially in the fields of controlling, costing, profitability analysis, etc., as well as of the concept of sustainable development. This presumed prior knowledge can be proven by a bachelor degree in business management or similar, or by adequate courses and/or practical work experience.
Offered in (winter/summer semester)	each summer semester

ch – contact hour

Title of Track	**Sustainable Development Science and Technology (30 ECTS)**
University offering the track	**Hiroshima University, Japan**
Learning Objectives	This module gives students international cooperation and sustainable development studies in the fields of ・Ecosystem Science, ・Environment Monitoring, ・Transportation & Urban Engineering, ・Marine Engineering, ・Regional Environment Simulator and Environmental and Resource Economics
Courses	1. Environmental Management Technology (2=6 ECTS) 2. Development Technology (4=12 ECTS) 3. Environment Simulator (2=6 ECTS) 4. Management and Conservation of Ecosystems (2=6 ECTS) 5. Marine Hydrodynamics (2=6 ECTS) 6. Transportation Planning (2=6 ECTS) 7. Transportation Engineering (2=6 ECTS) 8. Global Environmental Policies (2=6 ECTS) ・All courses are optional ・1 credit at Hiroshima University is equivalent to 3 ECTS.
Teaching Methods	・2 credits course(equivalent to 6 ECTS) consists of 15 classes (90min. each, including exercise) ・All classes are provided in English
Modes of Assessment	Evaluation will be done by reports and/or examinations rating as; A(100-80%), B(79-70 %), C(69-60%), D(below 59%; failure)
Presumed prior knowledge	Students who take this track are recommended to have fundamental knowledge of ・Mathematics (Calculus, Statistics) ・Sciences (Biology, Chemistry, Ecology, Physics, Geology) ・Economics (Micro and Macro)
Offered in (winter/summer semester)	summer semester

Title of Track	**Sustainable Urban and Regional Development (30 ECTS)**
University offering the track	**University of Graz / Austria**
Learning Objectives	After having taken this track, students will - have depth knowledge in "Sustainable Urban and Regional Development" , - possess an understanding of the coherences of the different factors which influence the processes of Regional Development, - gain basic and specific knowledge of Technical English in content and terminology of Human Geography in general and Sustainable Urban and Regional Development in specific, - succeed in self-contained scientific elaborations of defined themes in the field of Regional Development, - gain an introduction into political-geographical conflicts and a description of spatial-based local and regional conflicts as well as initiatives from the political-geographical point of view with a discussion of theories and - in practical lectures (seminars and practical courses) the students will learn how to act in a real geographical field of development processes together with all involved actors what leads to a higher potential of personal social competence.
Courses	1. Selected Topics of Spatial Development and Regional Planning. (10 ECTS, 5 ch) 2. Technical English in Human Geography. (4 ECTS, 2 ch) 3. Sustainable Tourism. (4 ECTS, 2 ch) 4. Selected topics of Spatial Areal Management (4 ECTS, 2 ch) 5. Regional Development Seminars (8 ECTS, 4 ch)
Teaching Methods	In the lectures 1 to 5 there will be offered a comprehensive content in regard to sustainable urban and regional development. The know-how transfers results from lecturing. Discussions and questions during the lecture are possible and even desired. In courses 6 to 7 the interactive component (discussion, presentation) is important.
Modes of Assessment	In courses 1 to 5 there will be an oral individual or a written group exam. In courses 6 to 7 a written research paper, an executive summary, the oral presentation (45 min.) and the quality of the scientific discussion will be assessed.
Presumed prior knowledge	Students that choose this track should possess some basic understanding of the approaches, methods and tools of "Sustainable Urban and Regional Development".
Offered in (winter/summer semester)	SS 09 and following

ch – contact hour

Title of Track	**Technology and control of the environment (30 ECTS)**
University offering the track	**Ca' Foscari University Venice / Italy**
Learning Objectives	The main learning objectives are: o To develop the ability of thinking at environmental problems in terms of monitoring systems and technological approaches. o To develop strong technical capabilities in monitoring systems and in technological design. o To develop the capability to operate in the market of environmental technologies and services.
Courses	Metodologie chimiche-analitiche per il controllo ambientale I (6 ECTS) Chemiometria II (6 ECTS) Processi trattamento rifiuti, reflui ed emissioni gassose I (6 ECTS) Impianti chimici e biochimici I (6 ECTS) Ecologia microbica e biotecnologie ambientali I (6 ECTS) Ecologia microbica e biotecnologie ambientali II (6 ECTS) Chimica dell'atmosfera (6 ECTS)
Teaching Methods	Lectures. Tutorials. Computer hands-on session. Group exercise, performed in small groups.
Modes of Assessment	Individual and group assessments during the course or written/oral exam at the end of the course
Presumed prior knowledge	Basic elements of calculus, chemistry, geology and ecology
Offered in (winter/summer semester)	5 course of 7 in the period February / June. To be defined yet.

Title of Track	**Terrestrial environment (30 ECTS)**
University offering the track	**Ca' Foscari University Venice / Italy**
Learning Objectives	The main learning objectives are: o To develop the ability of thinking at a system scale, by analysing and evaluating the relationships between biosphere, geosphere, hydrosphera, and atmosphere. o To achieve a clear understanding of the role human societes play in the modification of terrestrial ecosystems. o To develop appropriate management policies and tools. o To evaluate and assess the different approaches to the sustainable management of terrestrial resources
Courses	Geobotanica e scienza della vegetazione I (6 ECTS) Pedologia apllicata ad ecologia del paesaggio I-II (6 ECTS) Scienza del suolo (6 ECTS) Idrogeologia e idrologia I (6 ECTS) Ecologia delle acque dolci II (6 ECTS) Politica dell'ambiente (6 ECTS) Climatologia e Metereologia (6 ECTS)
Teaching Methods	Lectures. Tutorials. Computer hands-on session. Group exercise, performed in small groups.
Modes of Assessment	Individual and group assessments during the course or written/oral exam at the end of the course
Presumed prior knowledge	Basic elements of calculus, chemistry, geology and ecology
Offered in (winter/summer semester)	5 course of 7 in the period February / June. To be defined yet.

Title	**Integration Module (30 ECTS)**
University offering the module	**University of Graz / Austria**
Learning Objectives	After having taken this module, students o are able to apply their knowledge and scientific skills in inter- and trans-disciplinary teams on complex issues, o possess the according social skills, such as teamwork, conflict management, project management o have obtained basic formal knowledge in fields like (Geo)Informatics, Statistics, Systems Sciences, Chemistry, etc. o have broadened their competences in relevant fields of natural and social sciences, especially in those areas that they have not chosen for specialisation
List of courses offered under the header of "Integration Module" per university	Inter- and transdisciplinary case study (10 ECTS, 6 ch) Methods for inter- and transdisciplinary problem solving (2 ECTS, 2 ch) Training in social competences for inter- and transdisciplinary problem solving (1 ECTS, 2 ch) either: Qualitatitive Systems Sciences (2 ECTS, 2 ch) Seminar on Qualitatitive Systems Sciences (3 ECTS, 2 ch) or: Quantitative Systems Sciences (2 ECTS, 2 ch) Seminar on Quantitative Systems Sciences (3 ECTS, 2 ch) free electives (12 ECTS) recommended to choose courses from specialisation tracks or systems sciences
Teaching Methods	In the interdisciplinary practical exercise: self-responsible student group works supported by teachers in order to work inter- and transdisciplinarily on a given leading question Further, lectures, discussions, student presentations, training units, individual assignments,
Modes of Assessment	In the interdisciplinary practical exercise, the outcome of self-responsible student group works will be assessed. Further, exams, individual papers and other individual or group assignment,
Presumed prior knowledge	Students should have finished the basic module as well as their chosen specialisation module.
Offered in (winter/summer semester)	each winter semester

ch – contact hour

Title	**Integration Module (30 ECTS)**
University offering the module	**Ca' Foscari University Venice / Italy**
Learning Objectives	After having taken this module, students • are able to apply their knowledge and scientific skills in inter- and trans-disciplinary teams on complex issues, • possess the according social skills, such as writing, debating, conflict management, teamwork, project management • make an integral and critical assessment of available options for sustainable development • possess further specialized knowledge and/or skills related to the topic
List of courses offered under the header of "Integration Module" per university	Science of complexity: physics (6 ECTS) Environmental Management Systems and Environmental Impact Assessment II (6 ECTS) Ecology of transitional waters (6 ECTS) Marine biology (6 ECTS) Inter- or transdisciplinary case study (6 ECTS)
Teaching Methods	Lectures Tutorials Discussions Classes in computer laboratory Group exercise Practical activities
Modes of Assessment	Individual and group assessments during the course or written/oral exam at the end of the course In the interdisciplinary practical exercise, the outcome of self-responsible student group works will be assessed.
Presumed prior knowledge	Students should have finished the basic module as well as their chosen specialisation module.
Offered in (winter/summer semester)	Semester 3 each winter semester

Title	**Integration Module (30 ECTS)**
University offering the module	**Leipzig University / Germany**
Learning Objectives	After having taken this module, students • are able to apply their knowledge and scientific skills in inter- and trans-disciplinary teams on complex issues, • possess the according social skills, such as writing, debating, conflict management, teamwork, project management • make an integral and critical assessment of available options for sustainable development • possess further specialized knowledge and/or skills related to the topic
List of courses offered under the header of "Integration" per university	Obligatory for all students: 1. Project management and communication skills (5 ECTS) Students can choose one of the following three alternatives: ▪ Inter- or transdisciplinary case study on a current topic as team work (10 ECTS) ▪ Internship (employer organized individually with the support of IIRM and has to be approved by IIRM) (10 ECTS) ▪ Research assistance in a research project at IIRM (10 ECTS)
Teaching Methods	▪ Course 1: seminars ▪ Inter- or transdisciplinary case study: a seminar, presentations and project/ research work in a group on a given topic ▪ Internship or research assistance: independent working under professional supervision
Modes of Assessment	The performance of students in course 1 will be assessed based on: ▪ A project plan and its presentation The performance of students in the inter- or transdisciplinary case study will be assessed based on: ▪ A project report or research paper (in a team) ▪ Presentations of the project or research results (in a team) The internship or research assistance completed by students will be assessed based on: ▪ An internship or research report ▪ A presentation on the completed internship or research assistance
Presumed prior knowledge	Students that take this module should have completed the block "Basics in Sustainable Development" and their specialization track.
Offered in (winter/summer semester)	Semester 3 Each winter semester

Title	**Integration and Specialisation (30 ECTS)**
University offering the module	**Utrecht University / The Netherlands**
Learning Objectives	After having taken this module, students: • Are able to apply their knowledge and scientific skills in interdisciplinary teams on complex issues • Possess the according social skills, such as teamwork and project management • Have broadened their competences in relevant fields of natural and social sciences, especially in those areas that they have not chosen for specialisation, or • Have finished their research proposal for the master thesis
Courses	• The Sustainability Outlook (7,5 ECTS) • One of the following courses (7,5 ECTS) o Project Management o Development Theory o Energy and Resources Policies o Status of International Law and Organisation in the National Legal Order o Qualitative Research Methods • Electives (15 Ects) or master thesis (15 Ects)
Teaching Methods	▪ Lectures ▪ Tutorials ▪ Practical training ▪ Simulation games ▪ Assignments
Modes of Assessment	▪ Written and oral exams ▪ Individual and group assignments ▪ Papers and reports ▪ Presentations ▪ Process evaluation
Presumed prior knowledge	Basics in Sustainable Development
Offered in (winter/summer semester)	Semester 3 Each winter semester

ANNEX 2: Grading systems

The international grading system is used for the assessment of the workload achieved by the students.

ECTS Grade	Definition (D)	Definition (E)	Equivalent Graz	Equivalent Leipzig	Equivalent Venice	Equivalent Utrecht	Equivalent Basel	Equivalent Hiroshima
A	ausgezeichnete Leistungen und nur wenige unbedeutende Fehler	outstanding performance with only minor errors	(1) sehr gut	ausgezeichnet (1,0)	30 - 28	10 – 8.5	6	A
B	überdurchschnittliche Leistungen, aber einige Fehler	above the average standard but with some errors	(2) gut	sehr gut (1,1-1,5)	27 - 26	8.0 – 7.5	5.5	A
C	insgesamt gute und solide Arbeit, jedoch mit einigen grundlegenden Fehlern	generally sound work with a number of notable errors	(3) befriedigend	gut (1,6-2,5)	25 - 24	7.0	5	B
D	mittelmäßig, jedoch deutliche Mängel	fair but with significant shortcomings	(4) genügend	befriedigend (2,6-3,5)	23 - 21	6.5	4.5	C
E	die gezeigten Leistungen entsprechen den Mindestanforderungen	performance meets the minimum criteria	(4) genügend	ausreichend (3,6-4,0)	20 - 18	6.0 – 5.5	4	No Equivalent
F	es sind erhebliche Verbesserungen erforderlich, nicht bestanden	considerable further work is required, failed	(5) nicht genügend	mangelhaft (4,1-)		5 - 4 - 3 - 2 - 1	<4	D

System used as absolute system according to wording used above

Annex 3 – Quality Assurance

1.1. Current Quality Assurance Measures at the University of Graz

1.1.1. Appointment and habilitation procedure

Appointment and habilitation procedures are formal and strictly regulated and see to it that the best candidate is found for a professorship[4], which means that the teaching qualification (venia docendi) for a subject is only given to persons [5]who have the relevant high professional and didactic capabilities.[6]
Thus, appointment [7]and habilitation procedures can be regarded as "classical" quality assurance measures at universities and have been an integral part of higher education for many decades.
A by-law on this matter is in the works.

1.1.2. Strategy Development Process 2000-2003, Development Plan 2005-2010

In 2000, the University of Graz started a comprehensive strategy development process[8] which was characterized by high transparency, openness, and the involvement of university members from all organizational levels. The targeted objectives were linked to quality criteria, not least in order to slowly make those involved acquainted with Quality Management.
Internal performance agreements were already concluded between the individual organizational units and the university management in 2002 with the goal of increasing commitment to the development plans. The main focus of these agreements was the further development of innovative areas. The initial agreements were understood as good will contracts (for trying out and above all getting acquainted with the instrument) and not as a means of control.
The strategy development process took place over a period of three years (up to 2003). The new Development Plan of the University of Graz was adopted in July 2005.[9] The objectives worked out from 2000 to 2003 were adapted to the current formal frameworks of the University Act 2002 (*UG 2002*) and were reprioritized in part, although they still correspond to the results of the strategy development process 2000 - 2003.

1.1.3. Course evaluation

According to the statutes of the University of Graz, all required courses must be evaluated at least once every three years by participating students. The course evaluation is offered as a service to the teaching staff and is also possible on a voluntary basis. As a rule the results are analyzed and passed on to the teachers within two weeks after the survey, which makes it possible for them to already take them into consideration during the semester. The protection of confidence is strictly observed for the results, although the Deans of Studies and Vice Rectors can take a look at the evaluation and take consequent action.
The teaching evaluation is being revised at the moment. So far the survey has been understood in the sense of a customer satisfaction analysis, but in the future a special emphasis should be placed on the learning outcomes and their relevance to the students' careers.

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[4] See section 98f, University Act 2002 (*UG 2002*) for more detailed information on the appointment procedure.
[5] Cf. *Mitteilungsblatt* (information newsletter) of the University of Graz of April 15, 2005 (= Implementation of Habilitation Procedures)
[6] Cf. Pellert (2005)
[7] Cf. for example the summary in: Schmitt, Arnhold, Rüde (2004) 23-26.
[8] Cf. Zechlin (2002a), Zechlin (2002b), and Zechlin (2003).
[9] Cf. University of Graz (2005).

1.1.4. Curriculum development

In 2004, the University of Graz redrafted the internal approval process for the conception of new courses on the basis of the *UG 2002*. [10] A peer review process can also be commissioned by the Senate as part of this approval process.[11].
Both the respective Dean of Studies and the Rectorate's statements on how the financial costs will be covered as well as a verification of the legal admissibility of the new curricula by the Rectorate are integral parts of quality assurance.
The University of Graz has decided not to have individual courses of study accredited because it wants to create and ensure standardized curriculum development, doesn't want to face the increasingly difficult problem of finding experts, and last, but not least, for financial reasons. As an alternative to this, the University of Graz will take part in the "Process Quality for Teaching and Studying" project carried out by ACQUIN. The plan is to achieve university-wide quality goals and to create a quality culture by developing accredited, standardized and optimized curriculum design processes.[12]
An important document in advance of the ACQUIN project is the working out of a *Manual for Curriculum Development of Bachelor's and Master's Programs*: Here authors from the administration together with the Deans and the Senate have summed up all the processes necessary for curriculum development in one document. A draft is currently available and it will be discussed in more detail and agreed on in an evaluation process.

1.1.5. External research evaluation

According to prevailing practice, the University of Graz introduced an area-wide external peer review process for the evaluation of its research work and defined the evaluation of all the faculties as a strategic project in the development plan.[13] This is also a continuation of a project that began in 2001 for the evaluation of the Faculty of Natural Sciences and the Catholic-Theological Faculty. "This evaluation is part of the university's quality management system and contributes to quality and service assurance in a national and international context."[14]
The peers' recommendations are implemented via internal target agreements.
The basis of the research evaluation are guidelines which are oriented towards existing international standards and were developed in-house. Part of the evaluation also deals with certain research-oriented services. Joint implementation workshops serve to define research fields and objectives.

1.1.6. Research documentation

The strategy for research documentation (FODOK) is to present research work in a transparent way to all those interested (a research tool for those within and without the university). It is also a source system for the (research) data for the research evaluation. FODOK will also be integrated into the forthcoming Business Information Tool UNIGRAZ Online.

1.1.7. Good academic practice

The University of Graz is committed to the principles of good academic practice so that the research work produced meets international standards. These principles commit academics to observe legal and ethical rules and norms, to document and critically examine scholarly results, to observe strict honesty, and to prevent and avoid academic misconduct, among others.[15]

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[10] See the leaflet for the Curricular Committee at www.uni-graz.at/senat/downloads/merkblatt/cuko_zeitplaene_050919.pdf
[11] Section 10 (7) Legal Regulations on University Studies at the University of Graz http://www.uni-graz.at/zvwww/gesetze/satzung-ug02-06.html
[12] http://www.acquin.org/acquincms/index/Prozessakkreditierung
[13] University of Graz (2005) 36-39.
[14] Section 1, paragraph 1 *Mitteilungsblatt* (information newsletter) of the University of Graz of August 4, 2004.
[15] By-law "Principles for Assuring Good Academic Practice and Preventing Misconduct in the Academy". In the *Mitteilungsblatt* (information newsletter) of the University of Graz of March 24, 2004.

1.1.8. Internal reporting

The University of Graz establishes a comprehensive reporting system with the goal of providing key data from all the core areas of the university (research, teaching, continuing education and training, and the administration) for the different management levels. In this context, extensive data quality assurance measures have been taken for the university's own data warehouse since 2004. This and the fact that management decisions are mostly made with the aid of key data made available to those responsible, already guarantee very high data quality.

1.1.9. Services/Administration

A project was carried out in the services area for the optimization of the university's service facilities from 1999 to 2000.
The innovation prize is a successful initiative. Since 2004, it has called upon students to bring problems such as the organization of the studies to light and to work out creative solutions. The best projects are awarded the prize and are then implemented.
In addition, the implementation of SAP in both the financial and personnel areas has led to the documentation of the processes and a plan to meet quality standards.
The current implementation of Campus Online at the University of Graz is just one more opportunity taken by the university to re-organize or electronically provide all kinds of processes to be able to provide better and higher-quality services in the future in the area of student administration, for example.

1.1.10. Graduates and labor market analyses

Surveys and analyses of graduates are carried out as part of Strategic Project 14[16]. Labor market analyses and surveys will play an important part in the future, especially in the context of the development of new curricula. The use of such instruments is intended to examine the career entry and change phases of graduates more closely.

1.1.11. Internal revision

The Rectorate entrusted the Department of Service and Quality Management with the establishment of the Internal Revision (IR) at the University of Graz, which began in 2005. Its object is the entire range of the university's activities.
Internal Revision, as in most companies, plays an advisory role at the University of Graz. It always keeps quality standards in mind that will have to be observed in the future as part of its investigation of fraudulent actions or during routine examinations of drafts of alternative models.

1.1.12. Taking part in university rankings

Another quality assurance measure is the University of Graz' regular participation in different university rankings (e.g. the CHE university ranking).
The University of Graz is not afraid of being compared to other Austrian and international universities and is also willing to discuss the results in detail and to take appropriate steps if necessary.

KFU (ed.) (2005): Karl-Franzens-Universität Graz Rahmenstrategie Entwicklungsplan 2005 – 2010

Pellert, Ada (2004): Leitfragen Berufungen anlässlich der internationalen Anhörung am 6. und 7. Mai 2004, Köln

Schmitt, Tassilo; Arnhold, Nina; Rüde, Magnus (2004): Berufungsverfahren im Internationalen Vergleich. (=CHE (ed.) Arbeitspapier Nr.53)

Zechlin, Lothar (ed.) (2002a): Kursbuch Strategische Entwicklung der Universität Graz Band 1: Ziele und Prozesse; Graz

[16] University of Graz (2005) 64-66.

Zechlin, Lothar (ed.) (2002b): Kursbuch Strategische Entwicklung der Universität Graz Band 2: Leistungen und Projekte; Graz
Zechlin, Lothar (ed.) (2003): Kursbuch Strategische Entwicklung der Universität Graz Entwicklungsplanungen 2003/2004; Graz

Università Ca' Foscari di Venezia
Overview of the Quality Assurance System

Evaluation policies
Ca' Foscari has been one of the first Italian universities to institute an internal evaluation unit (Nucleo di Valutazione di Ateneo). Recently, there has been an effort to better integrate the evaluation activities with the decision making process. This has implied attempts at interacting more with the governing bodies of Ca' Foscari, especially with the Academic Senate, while trying to preserve the autonomy of the evaluation activity.
Since 2006, one of the vice-rectors is also appointed to take care of the University Quality System.

Appointment procedures
Appointment procedures are formal and strictly regulated by the national law. Every call for professorship positions is open to the international community. Appointment committees are elected for each position within the national scientific community of the same area, and only one out of five members of the committee may belong to the University offering the position. After three years, a different committee, selected by the National University Council (CUN), evaluates the scientific and didactic activities, and makes the position a permanent one. This appointment procedure can be regarded as a "classical" quality assurance method.

Participation to National Quality Assurance Projects
In the academic years 2001/2002/2003, Ca' Foscari participated to the national project CampusOne, specifically addressed to degree courses in order to sustain and disseminate technological educational and innovation. The main objectives of the project were:
- Didactic management, as a set of functions and services, which working alongside the university's own resources, facilitate relations with students, the verification of the effectiveness of the teaching, and dialogue with bodies outside the university and within the labour market
- Quality evaluation , based on a control methodology that in analyzing and evaluating the quality of the teaching of the curriculum courses, adopts the standpoint of attributing credits to the various study curricula.
- Establishing links between academic studies and the professions through internships, language and IT courses, as well as through regular on-going relations with businesses, economic agents and local authorities in order to bring the university into closer contact with society, the requirements of the labour market and corporate culture
- Communication, using activities and instruments suitable for doing justice to the new physiognomy of the university, as also its objectives and results, in order to encourage a constant dialogue with students designed to keep them well-informed and to guide their academic development and cultural growth throughout all the entire course of studies.

Course Evaluation
According with the national law, all required courses are evaluated every year by participating students. As a rule, the results are analyzed by the Faculty Dean and passed on to the teachers in order to give them useful hints to improve their courses.

Application of a shared model of evaluation of the educational services provided
The evaluation framework used within the CampusOne project has been further applied to support the quality assurance of all the Ca' Foscari degree programs: since 2004, all study programs are required to produce a self-evaluation report, which is evaluated through an audit system by the Internal Evaluation Unit.

Didactic Managers

Since 2002, we introduced in each Faculty a new professional figure, the didactic manager (MD) who oversees the processes and organisation of the academic programs. The MD does not have teaching duties: he liaises with the teaching staff, to promote improvements in the services and extend relations with the external world, and he/she oversees relations with students, the head office concerned with academic courses or the presidential offices of the faculties and the territory.

Research Evaluation

Ca' Foscari participated to the first national Research Evaluation Process, managed by CIVR (National Committee for Evaluation of Research), by selecting the best scientific works produced in the years 2001-'03. The results of the peer-to-peer evaluation of the 136 publications selected by the University were very positive, and put Ca' Foscari in the top ranking of the medium-size Italian Universities (see www.civr.it).

Graduates and labour market analyses

Ca' Foscari is part of the AlmaLaurea National Consortium, that takes care of tracking the follow-up of graduates, by interviewing them year after year with respect to their employment status. This provides measures to assess the employability of Ca' Foscari graduates in each discipline.

Strategy Development Plan 2007-2009

In 2007, the University starts a comprehensive strategy development process, according with the national law. The strategy development process takes place over a period of three years (up to 2009). The main focuses are the development of degree courses, student services, research, appointment and increasing internationalization. The target objectives have to be linked to quantitative and qualitative criteria.

Services/Administration

Since 2005, Ca' Foscari started a project about the evaluation of the administrative activities (MIP - progetto Good Practices), which involves 26 universities. The focus of the project is to measure the efficacy and effectiveness of the administrative action, creating university rankings and highlighting virtuous behaviours of the academic system.

Quality Assurance Mechanims at the University of Leipzig

Bonn Model for University Evaluation

The "Regulation on Study Evaluation" (Lehrevaluationsordnung) released by the Senate in June 2005 forms the framework for the quality assurance of study programs and conditions at the University of Leipzig. According to this regulation the minimum of two courses per each professor have to be evaluated by students annually.

In order to meet the current requirements for study and university evaluation (i.e. the available time and personnel resources as well as the pursuance of high quality programs) University of Leipzig replaced the traditional "Paper-Pencil-Procedure" for the quality assessment through the so-called „Bonn Model for University Evaluation" (Bonner Modell zur Hochschulevaluation) in 2005. This model was developed in the framework of a study reform by the Center for Evaluation and Methods at the University of Bonn from 2000 to 2005. In the framework of a cooperation contract the Center also carries out the evaluation at University of Leipzig. The body responsible for the implementation of the evaluation at the University of Leipzig is the Evaluation Office working under the supervision of the Vice-Rector for Teaching and Studies. The Bonn evaluation model consists of several modules that are all conducted online. The combination of several modules provides an extensive insight into the quality of tasks carried out at a university. At the University of Leipzig following standardized modules are applied:

1.1 Course and module evaluation
1.2 Evaluation of study conditions
1.3 Graduate survey
1.4 Scientific staff survey

1.1 Course and module evaluation

The Bonn model enables the evaluation of study programs both at the course and module levels. The aim of the course and module evaluation is to assess whether the course content and their combination into modules provide the students with the anticipated knowledge and skills and hence, whether the learning objectives are achieved at the course and module levels. The course and module evaluations are carried out at the University of Leipzig each semester in the end of lecture periods.

Different courses and modules are registered and activated for the online evaluation by the module coordinators and lecturers via internet using the login data attained from the Evaluation Office. For the evaluation purpose the coordinators are lecturers of all disciplines are provided with the same basic online questionnaire, which they can individually supplement with a maximum of 10 additional and more specific questions. The interdisciplinary questions and the regular replications of the assessment assure the comparability of data and enable benchmarking. The students that participate in the respective courses and module receive the login data for the questionnaire via email from the Evaluation Office and fill it in online. The participation in the evaluation is always voluntary.

For the analysis the collected data is aggreated per each course and module, i.e. no data can be drawn back to a certain student. All the evaluation participants receive the evaluation report as pdf via email. Furthermore, the lecturers and students are recommended to make an appointment to discuss and analyze the evaluation results jointly. The evaluation results

should support the lecturers and module coordinators in the further development of their courses and modules to guarantee the continuous improvement their quality.

1.2 Evaluation of study conditions

The evaluation of general study conditions at the University of Leipzig through present students is carried out annually. The students are asked to evaluate the content of study programs, general study conditions and their situation in research and promotion of young academics in the last two semesters. The evaluation results should especially contribute to the quality assurance at the faculties and evoke study program related optimization processes. The students addressed by the evaluation are selected randomly and receive the login data for the questionnaire (availabe in German and English) and the description of the evaluation process via email from the Evalution Office. The participation in the evaluation is voluntary. For the analysis the collected data is aggreated per each discipline, i.e. no data can be drawn back to a certain student. The evaluation report for the whole university is published at the homepage of the Evaluation Office and can be entered with the login data by all the evaluation participants. The deans of the faculties receive the evaluation reports for their respective faculty via email. The interpretation of the results and the development of corresponding measures for improvement are the responsibility of the deans, the study commission and the rectorate.

1.3 Gradute Survey

The graduate survey is carried out annually and the graduates are asked to evaluate retroactively the content of their study programs, general study conditions and their situation in research and promotion of younf academics at the University of Leipzig. Of special interest for the evaluation are the assessment of the career entry of the graduates and the value and benefits of the knowledge gained by them during the studies for their occupational practice. The procedures applied for the participation of the graduates in the evaluation, the survey process, the interpretation of the results and the development of measures for improvement are similar to the module “evaluation of study conditions”.

1.4 Scientific Staff Survey

The scientific staff survey is carried out annually and the staff is asked to evaluate their own teaching and research conditions at the University of Leipzig. A special questionairre enabling the evaluation of the working conditions at the University of Leipzig and the identification of potentials for improvement was developed for this purpose. The survey is addressed to all full and part time scientific staff members employed in teaching and research as well as to asscociate lecturers. The procedures applied for the participation of the scientific staff in the evaluation, the survey process, the interpretation of the results and the development of measures for improvement are similar to the module “evaluation of study conditions”.

Reporting

University of Leipzig runs a comprehensive reporting system on teaching/ studies and research with the goal of regular documentation of the development and performance of all the core areas of the university. The annually established reports include a study report, a research report and a rectorate report.

The establishment of study reports that used to contain the key statistical data and other relevant information about all the different study programs of the university has been stopped for the period of 2004-2007 due to the concentration of resources on carrying out the study reform and accreditation processes. Whether this quality assurance mechanism will be

continued in 2008 in accordance with the Study Report Regulation is currently being negotiated with the SMWK.

The research report has been published since 1993 and contains the key information and statistical data with performance indicators about the current research activities at the different faculties, centers and indisciplinary research institutes of the univerity. The first part of the report provides a summary of the research activities carried out at the different faculties and centers. Moreover, it provides an insight into the predominant interfaculty research projects, exhibitions, patent applications, workshops and conferences as well as prices and nominations awarded to the researchers of the University of Leipzig. The second part of the report focuses on the presentation of faculty specific information including all conducted research projects and scientific publications. The report can be downloaded at www.uni-leipzig.de/forschen.

The rectorate report presents a “full statement of accounts” published since 1993. It contains comprehensive data and statistical material as well as other relevant information about the development in and performance of teaching/ studies and research at the Uniersity of Leipzig in the previous study year. Moreover, it presents the efforts made by the university to increase its future attractiveness in a transparent manner.

Accreditation of study programs

In accordance with the recommendation of the Conference of Ministers for Education University of Leipzig pursues the accreditation of its newly conceptualized bachelor and master programs through a cluster process by the ZEvA (Zentrale Evaluations- und Akkreditierungsagentur). The aim of the accreditation is to assess these programs against the quality objectives set in national and international standards. An accreditation application with information about the concept, resources, conditions and procedures of a program has/ will be submitted for all the programs. If a study program is going to be accredited the implementation of a sustainable evaluation concept has to presented in the application. The accreditation process at the University of Leipzig is supervised by Vice-Rector for Teaching and Studies, whereas the Evaluation Office is responsible for all the organizational questions. The body responsible for the accreditation of bachelor and master programs at the federal level is the Accreditation Council. It consists of representatives of universities, states, students, practitioners and international experts and sets the minimum standards and criteria for accredited programs.

Good academic practice

In accordance with the Statues for the Assurance of Good Academic Practice University of Leipzig is committed to the principles of the “Commission for Self Regulation in Science”; a common initiative of the German Research Society (DFG) and the Conference of University Rectors. These principles commit academics to observe ethical norms and strict honesty, to prevent and avoid academic misconduct in order to enhance academic quality, to document the research methods applied and results achieved and to make the scienitific results public among academics through publications. Furthermore the statues of the university determine the action to be taken and the possible consequences in case of academic misconduct.

Internal revision

There is an Internal Revision at the University of Leipzig that audits a wide range of the university’s activities related to teaching and studies, research as well as administrative procedures.

Internal quality assurance Master's Degree program in Sustainable Development – Utrecht University

Quality Assurance

The master's program in Sustainable Development developed a Quality Management Approach when it started its first year. This approach describes the goals and actions to be taken with respect to the quality of the evaluation. Based on the requirements and guidelines set by Utrecht University, procedures are in place to monitor the quality of:

- the program: endpoints, individual courses, parts of the program (common courses and tracks), the master's thesis and internships, and the full program;
- the instructors;
- student support;
- infrastructure.

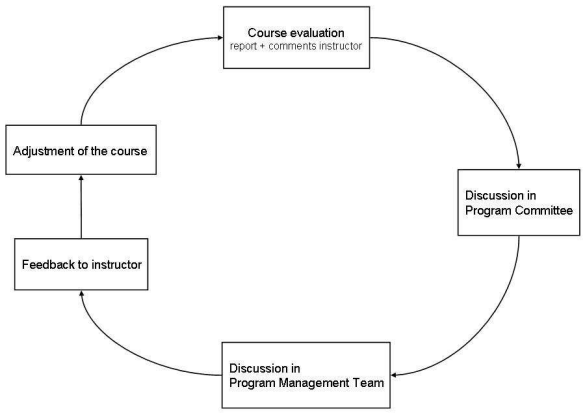
Besides, the quality management system itself is regularly evaluated. Currently, a policy document "Quality Management Approach Education Innovation and Environmental Sciences" is developed. Part of this document will be a calendar including the activities of all employees involved with the education programs.

The assurance concerning the quality of staff, student support and infrastructure is described in facet 14, 16 and 15 respectively. In this chapter the quality assurance concerning the education program will be elucidated.

Evaluation of courses and MSc theses

To evaluate individual courses and theses, we use standard evaluation forms (with some space for specific questions). These forms address issues like content, organization, quality of the instructors (including their proficiency in English), goal attainment, and study load. As a general indicator, the student also gives a grade (1-10) for the course. The evaluations are covered in a report, where the instructor responds to the findings. This report is discussed in the Program Commission and then by the Board of Directors of the Program, who take the Commission's recommendations into account. Depending on their findings, consultations are started between the track coordinators and the instructors in question with respect to any changes deemed necessary (Figure 3).

Figure 3 Periodical cycle of internal quality management concerning the evaluation of courses



Evaluation of the curriculum

The quality of the overall program is evaluated in discussions with students and with the instructors. Several issues are usually raised at these meetings: program coherence; scientific

level; adequacy of teaching methods; variance in teaching methods; level of academic teaching skills; and adequate preparation.

Quality Assurance Measures at Hiroshima University,
Graduate School for International Development and Cooperation (IDEC)

1. Outline of the Evaluation of Faculty Member Activities
   According to the 'Outline of Individual Evaluation of Faculty Members at Hiroshima University,' announced by the University Evaluation Committee in March 2006, IDEC has decided to evaluate faculty members in terms of the following 4 categories: 1) Education, 2) Research, 3) Contribution to Society, and 4) University Management. Furthermore, each category has the following items to be used to evaluate the activities of faculty members on the whole.
   1) Education
      (1) The number of courses offered by the faculty member
      (2) The number of Ph.D. and Master's students for whom he/she acts as the academic advisor
      (3) Course evaluation by students (*see #2 "Course Evaluation")
   2) Research
      (1) The number of papers he/she has published
      (2) The books he/she has published or translated
      (3) Reports
      (4) Other research accomplishments
      (5) Fund(s) he/she has obtained from outside the University and the amount(s)
      (6) Research project he/she has been committed to
      (7) Intellectual property, such as a patents, he/she has gained
      (8) Presentation(s) at academic conferences
      (9) Awards received
   3) University Management
      (1) Work experience as the Dean, or Vice Dean of IDEC, or the director of other centers.
      (2) Experience as a member or chairperson of committees in the University and in IDEC

   The Dean of IDEC has the authority to review the faculty members' evaluation and suggest improvements.
   (Established by the IDEC Faculty Meeting, July 2006)

2. Course Evaluation
   At the end of each semester, the Internal Review and Evaluation Committee of IDEC conducts 'course evaluation questionnaires' for all courses offered at IDEC to all students who have taken each course. The outcome of the questionnaire is open to the public and is also reported to the instructors to help them improve their own courses.
   (Proposed by the IDEC Internal Review and Evaluation Committee and approved by the IDEC Faculty Meeting in 2003)

3. Model Course Observation
   For the purpose of improving each course, some model courses are selected to be open to all faculty members for observation.

   (Proposed by the IDEC Internal Review and Evaluation Committee and approved by the IDEC Faculty Meeting in 2005)

Quality Assurance University of Basel

1) The University of Basel will undertake an accrediting procedure during the next year for the university as a whole. An essential part of that procedure consists in implementing a quality management system on the level of the university. The quality management system defines quality assurance mechanisms including all relevant university domains such as professorship appointments, research, education, knowledge transfer, administration, internal academic organisation and so on. The university of Basel already implemented the Bologna system for all its Bachelor and Master programs and will reform its doctoral programs according Bologna requirements.

2) The university of Basel regularly evaluates its research and education portfolio and defines development strategies every six years.

3) The Rectors Conference of Swiss Universities (CRUS) defined general rules for all regular study programs at Swiss Universities. Among others they include a minimal number of professors and a minimal number of beginners for each study program to ensure a critical mass hence competitivity for each of them.

4) Faculties are responsible for academic quality of their study programs. An examination commission is responsible for all educational issues, whereas each study program is operationally lead by a teaching commission. Student delegates are always and obligatory members of these commissions.

5) The faculties are responsible for course evaluation. The faculty for Socials Science and Arts (Philosophisch-Historische Fakultät) established a standardized evaluation procedure. The results are not published but nevertheless used as an instrument for improving teaching. The faculty pays strong attention for establishing a fertile communicative environment between teachers and students as part of course evaluation procedures. Concerning the Master program in Sustainable Development the three faculties involved delegated course evaluation to the interfaculty teaching commission that proceeds accordingly.

6) New Programs are regularly evaluated. The Master program in Sustainable Development will undergo an evaluation procedure in 2008.

Annex 4 – Degree Details

Prerequisites of the Italian Ministry to be fulfilled for the awarding of the Italian degree „Laura Magistrale“ in Sustainable Development (LM-75):

Groups of Subjects	**Minimum ECTS**
Group A	
1. Chemistry	6
2. Biology	6
3. Earth Sciences	6
4. Ecology	6
5. Agricultural, technical und management subjects	4
6. Legal, economic and evaluation subjects	4
Sub total (Group A)	**32 ECTS**
Group B	
Electives belonging to above groups (1.-6.) in any combination.	16
Total (A + B)	**48 ECTS**

This results in the following requirements based on the combinations of modules and tracks:

a) Home University: Graz
Mobility Semester: Venice, Leipzig, Utrecht, Hiroshima, Basel
- All requirements met

b) Home University: Venice
Mobility Semester: Graz, Leipzig, Utrecht, Hiroshima, Basel
- 6 ECTS in Ecology

c) Home University: Utrecht
Mobility Semester: Venice
- 6 ECTS Biology
- 4 ECTS Agricultural, technical and Management subjects

d) Home University: Utrecht
Mobility Semester: Graz (track Climate and Environmental Change)
- 6 ECTS Biology
- 2 ECTS Agricultural, technical and Management subjects
- 6 ECTS Chemistry

e) Home University: Leipzig
Mobility Semester: Venice
- 2 ECTS Biology
- 4 ECTS Agricultural, technical and Management subjects

f) Home University: Leipzig
Mobility Semester: Graz (track Climate and Environmental Change)
- 2 ECTS Biology
- 2 ECTS Agricultural, technical and Management subjects

d) Home University: Leipzig
Mobility Semester: Graz (track Climate and Environmental Change)
- 2 ECTS Biology
- 2 ECTS Agricultural, technical and Management subjects

In order to receive the Italian degree, students cannot combine home university Utrecht with mobility in Leipzig and vice versa.