

ANNEX I
Study programme
International Master Molecular Medicine

SEMESTER 1: STUDENTS AT HOME INSTITUTION

a. Study Programme for UNIPD STUDENTS

Activities	ECTS
MOLECULAR BIOLOGY OF TISSUES	8
STEM CELLS AND DEVELOPMENTAL BIOLOGY	6
STATISTICS AND BIOINFORMATICS	8
INFECTIOUS DISEASES AND EPIDEMIOLOGY	6
1 free choice exam among the following:	
a) BIOMATERIALS OF TISSUE ENGINEERING	4
b) HUMAN GENETICS IN HEALTH AND DISEASE: ACHIEVEMENTS AND NEXT GOALS	4
c) BRIDGING SCIENCE AND BUSINESS: THE BIOTECH JOURNEY	4
TOTAL	32

b. Study Programme for UNIULM STUDENTS

Activities	ECTS
CURRENT CONCEPTS IN STEM CELL BIOLOGY AND REGENERATIVE MEDICINE*	6
BIOINFORMATICS AND SYSTEMS BIOLOGY*	6
NEW DRUG DISCOVERY, DEVELOPMENT AND EVALUATION*	6
PRACTICAL TRAINING IN LABORATORY METHODS	9
TRANSLATIONAL IMAGING*	3
TOXICOLOGY FOR NATURAL SCIENCES*	3
INTRODUCTION TO HUMAN NEUROPHYSIOLOGY*	3
INTRODUCTION TO HUMAN NEUROANATOMY*	3
EUROPEAN PATENT LAW*	3
MECHANISMS AND DISEASES OF AGING AND INTERVENTIONS*	6
TOTAL	30

*elective modules, in total 21 ECTS have to be achieved

SEMESTER 2: STUDENTS AT HOME INSTITUTION

c. Study Programme for UNIPD STUDENTS

Activities	ECTS
EXPERIMENTAL SYSTEMS AND TECHNOLOGIES	6
MOLECULAR IMMUNOLOGY AND PATHOLOGY	8
THE BIOLOGY OF BIG DATA	8
NEW DRUG TARGETS AND BIOMOLECULES	6
1 free choice exam among the following:*	
- LABORATORY ACTIVITIES 1 - LABORATORY ACTIVITIES 2 - LABORATORY ACTIVITIES 3 - LABORATORY ACTIVITIES 4 - LABORATORY ACTIVITIES 5 - LABORATORY ACTIVITIES 6	4
TOTAL	32

* Students can choose only one Laboratory Activities

d. Study Programme for UNIULM STUDENTS

Activities	ECTS
Block "Molecular Oncology": 4 weeks research internship, seminar with integrated lecture	12
Bioethics, Philosophy and Good Practice of Science	6
Block "Trauma and Infection": 4 weeks research internship, seminar with integrated lecture	12
TOTAL	30

Semester 3: student exchange between the two universities

e. Study Programme provided at UNIPD University

Activities	ECTS
First part of semester: students can choose between:	
AI FOR DIGITAL PATHOLOGY	8
ANALYSIS OF OMICS DATA	8
OR	
NEXT GENERATION DIAGNOSTICS	8
ADVANCED THERAPEUTIC STRATEGIES	8
Second part of semester: students can choose between:	
DISEASE MECHANISMS: FROM DISCOVERY TO CLINICAL TRANSLATION	9
OR:	
ADVANCED BIOTECHNOLOGIES	9
<i>1 free choice exam among the previous list shown under Semester 1</i>	4
SEMINAR	1
TOTAL	30

f. Study Programme provided at UNIULM University

Activities	ECTS
Block "Cell Biology": 4 weeks research internship, seminar with integrated lecture	12
Clinical Trials / Project Management and Funding	6
Specialization Block "Molecular Oncology II" / "Toxicology": 4 weeks research internship, seminar with integrated lecture	12
TOTAL	30

Semester 4: students at home or host institution

ACTIVITY	ECTS
Final Thesis	30 at ULM 30 at UNIPD