



**ASIIN Seal**

## **Accreditation Report**

**Bachelor's Degree and Medical Doctor Programme**  
*Medicine*

**Master's Degree Programmes**  
*Basic Medical Science*  
*Tropical Medicine*

Provided by:  
**Universitas Airlangga, Surabaya**

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## A About the Accreditation Process

| Name of the degree programme (in original language)  | (Official) English translation of the name | Labels applied for <sup>1</sup> | Previous accreditation (issuing agency, validity) | Involved Technical Committees (TC) <sup>2</sup> |
|--|--|---------------------------------|---|---|
| Program Studi Kedokteran   | Medical Programme                          | ASIIN                           | -   | 14  |
| Program Studi Magister Ilmu Kedokteran Dasar   | Master Programme Basic Medical Science     | ASIIN                           | -   | 14  |
| Program Studi Magister Ilmu Kedokteran Tropis  | Master Programme Tropical Medicine         | ASIIN                           | -   | 14  |
| <p><b>Date of the contract:</b> 16.10.2019</p> <p><b>Submission of the final version of the self-assessment report:</b> 31.01.2020</p> <p><b>Date of the onsite visit:</b> 18.02. – 19.02.2020</p> <p><b>at:</b> Surabaya, Indonesia</p>   |  |                                 |   |   |
| <p><b>Peer panel:</b></p> <p>Prof. Dr. Kevin Cassar, University of Malta</p> <p>Dr. Thorsten Hornung, University Hospital Bonn</p> <p>Prof. Dr. Thomas Reinheckel, University of Freiburg</p> <p>Dr. Sophie Schneitler, Saarland University Hospital</p> <p>Mochamad Iskandarsyah Agung Ramadha, Faculty of Medicine Universitas Indonesia</p> |  |                                 |   |   |
| <p><b>Representative of the ASIIN headquarter:</b></p> <p>Rainer Arnold</p>  |  |                                 |   |   |
| <p><b>Responsible decision-making committee:</b></p>   |  |                                 |   |   |

<sup>1</sup> ASIIN Seal for degree programmes;

<sup>2</sup> TC: Technical Committee for the following subject areas: TC 14 – Medicine

|   |  |
|---|--|
| Accreditation Commission for Degree Programmes  |  |
| <b>Criteria used:</b><br>European Standards and Guidelines as of 15.05.2015<br>ASIIN General Criteria as of 28.03.2014<br>Subject-Specific Criteria of Technical Committee 14 – Medicine as of 20.09.2019 |  |

## B Characteristics of the Degree Programmes

| a) Name                                | Final degree (original/English translation)                        | b) Areas of Specialization   | c) Corresponding level of the EQF <sup>3</sup> | d) Mode of Study | e) Double/Joint Degree | f) Duration | g) Credit points/unit  | h) Intake rhythm & First time of offer |
|--|--|--|--|------------------|------------------------|-------------|--|--|
| Medical Programme                      | S. Ked.(Sarjana Kedokteran/Bachelor of Medicine)                   |  | 6  | Full time        | no                     | 7 Semester  | 155 credits= 203.86 ECTS   | August / 2005                          |
|  | Medical Doctor (M.D.)  |  | 7  |                  |                        | 4 Semester  | 57 credits= 120.4 ECTS   | March / 2005                           |
| Master Programme Basic Medical Science | M.Si (Magister Sains/ Master of Science)                           | 1. Anatomy & Histology;<br>2. Physiology;<br>3. Biochemistry;<br>4. Pharmacology;<br>5. Pathology;<br>6. Medical Microbiology; 7. Medical Parasitology;<br>8. Medical Laboratory | 7  | Full time        | no                     | 4 Semester  | 41 credits = 99.14 ECTS  | August / 2001                          |
| Master Programme Tropical Medicine     | M.Ked.Trop. (Magister Kedokteran Tropik/ Master Tropical Medicine) | 1. Clinical Tropical Medicine<br>2. Epidemiology Tropical Medicine   | 7  | Full time        | no                     | 4 Semester  | 44 credits = 85.67 ECTS (Clinical Specialisation) 89.43 ECTS (Epidemiology Specialisation) | August / 2001                          |

For the Medical Programme Universitas Airlangga (UNAIR) has presented the following profile in the Self-Assessment Report:

### “Vision and Mission of Medical Programme

1.1. Vision of Medical Programme FMUA is:

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<sup>3</sup> EQF = The European Qualifications Framework for lifelong learning

To be a medical programme that is dignified, competitive, and excellent at the national and international levels, based on the latest research and technology in supporting the process of education and community outreach program.

1.2. Missions of Medical Programme FMUA are:

1. Conducting global competence based academic education and profession, to produce highly qualified graduates, who uphold ethics and religious morality.
2. Improving the quality and quantity of innovative, nationally and internationally recognized fundamental, basic and policy research to support education, community outreach program and service.
3. Dedicating the expertise in science, technology, humanities and arts to the community with national and international health insights.
4. Developing institutions that are quality oriented and able to compete at international level.”

For the Master’s Programme Basic Medical Science Universitas Airlangga (UNAIR) has presented the following profile in the Self-Assessment Report:

### **“Vision and Mission Basic Medical Science**

2.1. The vision of the Master Programme Basic Medical Science FMUA is:

To be Master Basic Medical Science Study Programme Faculty of Medicine Universitas Airlangga that is prominent in educational, research, and community service fields in both National and International Level.

2.2. Mission of the Master Programme Basic Medical Science FMUA are as following:

1. Conducting academic education in medical and biomedical fields with the basis of modern technology that meets international standards.
2. Conducting basic and applied researches in medical and biomedical field that are innovative and qualified by international standards to support educational and health service developments.
3. Dedicating skills in medical and biomedical fields for community services.”

For the Master’s Programme Tropical Medicine Universitas Airlangga (UNAIR) has presented the following profile in the Self-Assessment Report:

**“Vision and Mission Tropical Medicine**

3.1. The vision of the Master Program Tropical Medicine FMUA is:

To be a Master program Tropical medicine that is independent, innovative, ethical, and excellent at the national and international levels in education, research and community service in 2030.

3.2. Missions of Master Program Tropical Medicine FMUA are conducting:

1. Tropical medicine education that is excellent and competitive at national and international levels.
2. Tropical medicine research that supports development of education and community service.
3. Community service aimed at contributing to tropical disease control.”

## C Analysis and Findings of Peers

### 1. Mission and Outcomes

#### Criterion 1.1 Statements of purpose and outcome

**Evidence:**

- Self-Assessment Report
- Webpage Medical Programme: <http://dokter.fk.unair.ac.id/en/>
- Webpage Master Basic Medicine: <http://magister.ikd.fk.unair.ac.id/en>
- Webpage Master Tropical Medicine: <http://magister.ikt.fk.unair.ac.id/?lang=en>
- Sample Diploma Supplements
- Discussions during the audit

**Preliminary assessment and analysis of the peers:**

The intended learning outcomes of all three degree programmes under review are mentioned in the Self-Assessment Report. They are divided between Specialist Competencies and Social Competencies. However, the peers notice that the objectives of the programmes are not listed on UNAIR's webpage. This needs to be corrected, because the intended learning outcomes should be easily accessible to all stakeholders e.g. by publishing them on the programme's website. This is also the case for the relevant information about the degree programmes (study plans, module descriptions, academic study guides). These documents should also be available in English for all stakeholders.

#### Criterion 1.2 Participation in the formulation of mission and outcomes

**Evidence:**

- Self-Assessment Report
- Discussions during the audit

**Preliminary assessment and analysis of the peers:**

According to the Self-Assessment Report, internal (programmes coordinators, lecturers, and students) as well as external stakeholders are involved in formulating and further de-



veloping the objectives and intended learning outcomes of the three programmes. The internal stakeholders include alumni, representatives from administrative, educational and professional institutions, such as the Indonesian Association of Medical Education Institutions (Asosiasi Institusi Pendidikan Kedokteran Indonesia/AIPKI), the Indonesian Consortium for Biomedical Sciences (Konsorsium Ilmu Biomedik Indonesia/KIBI), the Indonesian Collegium of Medical Doctors (Kolegium Dokter Indonesia/KDI), the Indonesian Medical Council (Konsil Kedokteran Indonesia/KKI), the Ministry of Health of Indonesia (Kementerian Kesehatan Republik Indonesia/Kemenkes RI), the Ministry of Education and Culture of Indonesia (Kementerian Pendidikan dan Kebudayaan RI), and the Ministry of Research, Technology, and Higher Education of Indonesia (Kementerian Riset, Teknologi dan Pendidikan Tinggi Republik Indonesia/Kemendikristekdikti RI). Input from the stakeholders is important for taking different aspects such as the labour market needs, recent healthcare regulation in Indonesia, and current developments in healthcare into account.

The assessment of the objectives and learning outcomes is performed periodically by the Quality Assurance Unit on programme level and is supervised by the Quality Assurance Unit at faculty and university level.

The peers confirm that there is a well described and established process for designing and validating the objectives and learning outcomes. All relevant stakeholders are involved in the process.

### **Criterion 1.3 Institutional autonomy and academic freedom**

#### **Evidence:**

- Self-Assessment Report
- Discussions during the audit

#### **Preliminary assessment and analysis of the peers:**

As a semi-autonomous public university, UNAIR is able to formulate and implement policies and degree programmes according to their own agenda. Thus, academic freedom is given.

#### **Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 1:**

The peers confirm that UNAIR has updated and complemented the webpages of all three programmes under review. All necessary information (learning outcomes, study plan, and module descriptions) are now available in English on the university's webpage.

The peers consider criterion 1 to be fulfilled.

## 2. Educational Programme

|   |
|---|
| <b>Criterion 2.1 Curriculum model and instructional methods</b> |
|---|

**Evidence:**

- Self-Assessment Report
- Study Plans
- Module descriptions
- Webpage Medical Programme: <http://dokter.fk.unair.ac.id/en/>
- Webpage Master Basic Medicine: <http://magister.ikd.fk.unair.ac.id/>
- Webpage Master Tropical Medicine: <http://magister.ikt.fk.unair.ac.id/?lang=en>
- Discussions during the audit

**Preliminary assessment and analysis of the peers:**

The Medical Programme was established in 2005 and was further developed in 2016. The 2016 curriculum consists of two cycles: the Bachelor's degree and the Professional degree. The Bachelor's programme consists of 7 semesters with 155 credits (=ECTS 203.86) in a modularised system, whereas the Professional programme is conducted for 4 semesters with 57 credits (=ECTS 120.4). The curriculum includes lectures and small group teaching as well as practical hands-on experience through clinical rotations in hospitals.

Usually during the last year of studies, Bachelor's students must complete community service (Kuliah Kerja Nyata-Belajar Bersama Masyarakat/KKN-BBM). The peers discuss with the programme coordinators the content and goal of this course. The programme coordinators explain that community service is compulsory for all Indonesian students. It has a minimum length of eight weeks and often takes place in villages or rural areas where students stay and live together with the local people. The course is designed "to allow students to apply their knowledge based on own field in order to empower society." Since the community service usually takes place in remote areas, the students cannot attend any classes during this time. The students work in interdisciplinary teams during the community service in order to advance society and bring further development about. This course was introduced at all Indonesian Universities in 1971. The assessment of the community service consists of a work plan, programme implementation, and activity report. The peers understand that students should work for the benefit of the community and the Indonesian society during the community service and support this concept.

The programme has the following modes of teaching: lectures, small group teachings, clinical skills sessions, simulation sessions, clinical rotations, tutorials, and seminars. Audio-

visual aids and e-learning supplement the attendance-based classes. Tutorials with problem-based learning and a student-centred teaching approach are the learning methods used in most of the advanced courses. This method comprises several steps, which requires students to gather information, solve problems, make reports, and discuss and present the results. In addition, thesis proposal and research activities, followed by a written thesis, are compulsory tasks for all students in the Medical Programme.

The curriculum of the Master's Programme Basic Medical Science includes attendance based classes in the first year and research project proposal, research implementation, thesis writing, and publication in a national/international journal in the second year of studies. The Master's Programme Basic Medical Science offers 8 different areas of specialisation: 1). Anatomy & Histology; 2). Physiology; 3). Biochemistry; 4). Pharmacology; 5). Pathology; 6). Medical Microbiology; 7). Medical Parasitology; 8). Medical Laboratory. The curriculum is designed for 4 semesters with 41 credits (=ECTS 99.14).

In 2016, the new curriculum of the Master's Programme Tropical Medicine was implemented, it encompasses 44 credits (=ECTS 85.67 (Clinical) / 89.43 (Epidemiology)) in 4 semesters (2 years). The study programme has adopted a student-centred and problem based teaching concept with a community or hospital oriented learning process. This strategy is implemented from the first semester to establish a reciprocal relationship between basic science, clinical science, and the epidemiological science tropical medicine. The programme offers two major interests: Clinical Tropical Medicine and Epidemiology Tropical Medicine. The curriculum of the Master's Programme Tropical Medicine includes attendance based classes in the first year and research project proposal, research implementation, thesis writing, and publication in a national/international journal in the second year of studies.

In the specialisation Clinical Tropical Medicine, students focus on subjects related with clinical sciences (e.g. clinical tropical medicine; paediatric tropical medicine, health prevention; management and control of nosocomial infection.). In the specialisation Epidemiology Tropical Medicine, the curriculum includes subjects related to epidemiological science (e.g. epidemiology surveillance; communication and advocacy in tropical disease, outbreak investigation and surveillance).

According to the academic regulations, attendance for lectures, tutorials, seminars, practical, laboratory and clinical placements, and any other teaching session in whatever mode is obligatory for students. At least 75% of the classes have to be attended; the teachers keep attendance lists for each class. Students who fail to attend the classes may be excluded from the final exam and thus may fail the class.

The auditors confirm that all three medical programmes have a defined study plan and the curriculum ensures that students are prepared for lifelong learning. In addition, the individual forms of teaching and learning (lectures, tutorials, seminars, electives, project work, and thesis) are defined in a way that students know what to expect.

### Criterion 2.2 Scientific method

#### Evidence:

- Self-Assessment Report
- Study Plans
- Module descriptions
- Discussions during the audit

#### Preliminary assessment and analysis of the peers:

From the first semester of the Medical Programme, students are introduced to critical thinking and scientific methods. Especially in the evidence based learning courses, students need to solve clinical cases by using a scientific approach. In the fourth semester, students are required to develop a research proposal following the research methodology course. The proposal will be marked and evaluated by the advisor so that students are allowed to conduct the research project. In the sixth semester, students present their research projects followed by publication in the seventh semester. All of these activities are part of the modules “Research 1 and 2”. In the professional stage, student rotate in the clinical departments. Several activities are included in these rotations such as bed side teaching, and producing a scientific report with a literature review or case report.

One important goal of both Master’s programmes is to educate a medical researcher and teacher. Therefore, both programmes focus on research activities by teaching students how to identify and treat diseases based on scientific principles. In the third and fourth semester, students design their research proposal, conduct their research activities and write a thesis, which should result in a publication in a reputable scientific journal.

The peers confirm that students learn the principles of scientific methods and are introduced to medical research methods and evidence-based medicine.

### Criterion 2.3 Basic Biomedical Sciences

#### Evidence:

- Self-Assessment Report

- Study plans
- Module descriptions
- Discussions during the audit

### **Preliminary assessment and analysis of the peers:**

Classes in basic biomedical sciences such as “Medical Biology”, “Biochemistry”, “Microbiology”, “Physiology”, and “Anatomy” are offered in the first semesters of the Medical Programme. It is expected that students acquire the necessary knowledge in basic biomedical sciences in order to be able to understand the underlying scientific principles and fundamental concepts, which enables them to follow and apply the methods of clinical sciences in the next level of studies. The basic biomedical sciences are taught in courses based on human body systems using the problem-based approach, including soft skills and social reflection. The integration of new developments in the field of biomedical sciences into the core content of the Medical Programme is ensured through active participation of researchers in the design of the programme and its content.

Since the focus of both Master’s programmes is on research and on advanced clinical subjects, no classes in biomedical sciences are offered. The Master’s students are expected to have acquired the necessary competences in biomedical sciences in their previous studies (they need to complete a Bachelor’s or MD programme before being admitted to a Master’s programme).

## **Criterion 2.4 Behavioural and social sciences and medical ethics**

### **Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

### **Preliminary assessment and analysis of the peers:**

Behavioural and social sciences including courses such as “Pancasila”, “Civics”, “Bahasa Indonesia”, “Religion”, “Science Philosophy”, “Medical Ethics”, “Empathy, Effective Communication and Social Accountability”, and “Social Aspects of Medicine” are extensively taught especially in the first three semesters of the Medical Programme. The acquired social competences can directly be applied during the Community Service. The goal is to familiarise students with the changing scientific, technological, demographic, cultural contexts, and the anticipated needs of the society and the health care system.

The auditors confirm that students of the Medical Programme are well educated in social sciences and ethics and are introduced to evidence based medicine, health promotion and preventive medicine.

As described before, the focus of the Master's programmes is on research and students have already completed a Bachelor's or MD programme. Therefore, only few classes, such as "Philosophy and Research Bioethics" and "Research Methodology" are offered in the area of behavioural and social sciences. The peers consider this sufficient for Master's students.

### Criterion 2.5 Clinical sciences and skills

#### **Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

#### **Preliminary assessment and analysis of the peers:**

Clinical sciences and skills are introduced during the Medical Programme through students' exposure to the clinical setting and through the provision of a clinical environment. Bedside teaching in small groups as well as simulation equipment (mannequins etc.) are used to expose students to the application of clinical science.

Supplementing the lectures, small group teaching (clinical skills sessions, simulation sessions and case-based scenarios) are conducted during the professional stage of the Medical Programme. Students are required to attend clinical placements on rotation basis in the different medical areas (Internal Medicine, Neurology, Paediatrics, Pharmacology, Psychiatry, Forensics, Dermatology, Pathology, Surgery, Obstetrics and Gynaecology, Ophthalmology, Anaesthesiology, and Public Health).

Graduates of the Master's Programme Basic Medical Science are set to work primarily in an academic environment as lecturer, health care manager, or researcher. Thus, in this programme, students are not required to interact directly with patients, although the majority of the research topics are related to the clinical aspects. Therefore, students usually need to interact with the patients at the hospital during their research activities.

Graduates of Master's Programme Tropical Medicine are expected to take an active role in tropical disease prevention in Indonesia. Consequently, students need to have a close interaction with the patients in hospitals or community health centres.

Most of the Faculty's academic staff members have a number of years of clinical experience and are actively involved in research activities and supervise Bachelor's or Master's students. The Faculty of Medicine is located next to Dr. Soetomo General Hospital, a tertiary hospital for East Indonesia. Medical students can study at Dr. Soetomo General Hospital and the medical staff serves as clinical lecturers at UNAIR. In addition, cooperations with the regional health office, the public health centre, and other hospitals are established to ensure a close student-patient interaction.

The auditors confirm that students of all three programmes under review acquire sufficient knowledge and clinical and professional skills. However, they notice that the share of planned contact with patients in relevant clinical settings in the academic stage of the Medical Programme (first 7 semesters) is rather low by international standards. For this reason, the peers recommend increasing the share of clinical exposure and the time students spend in planned contact with patients in the academic stage.

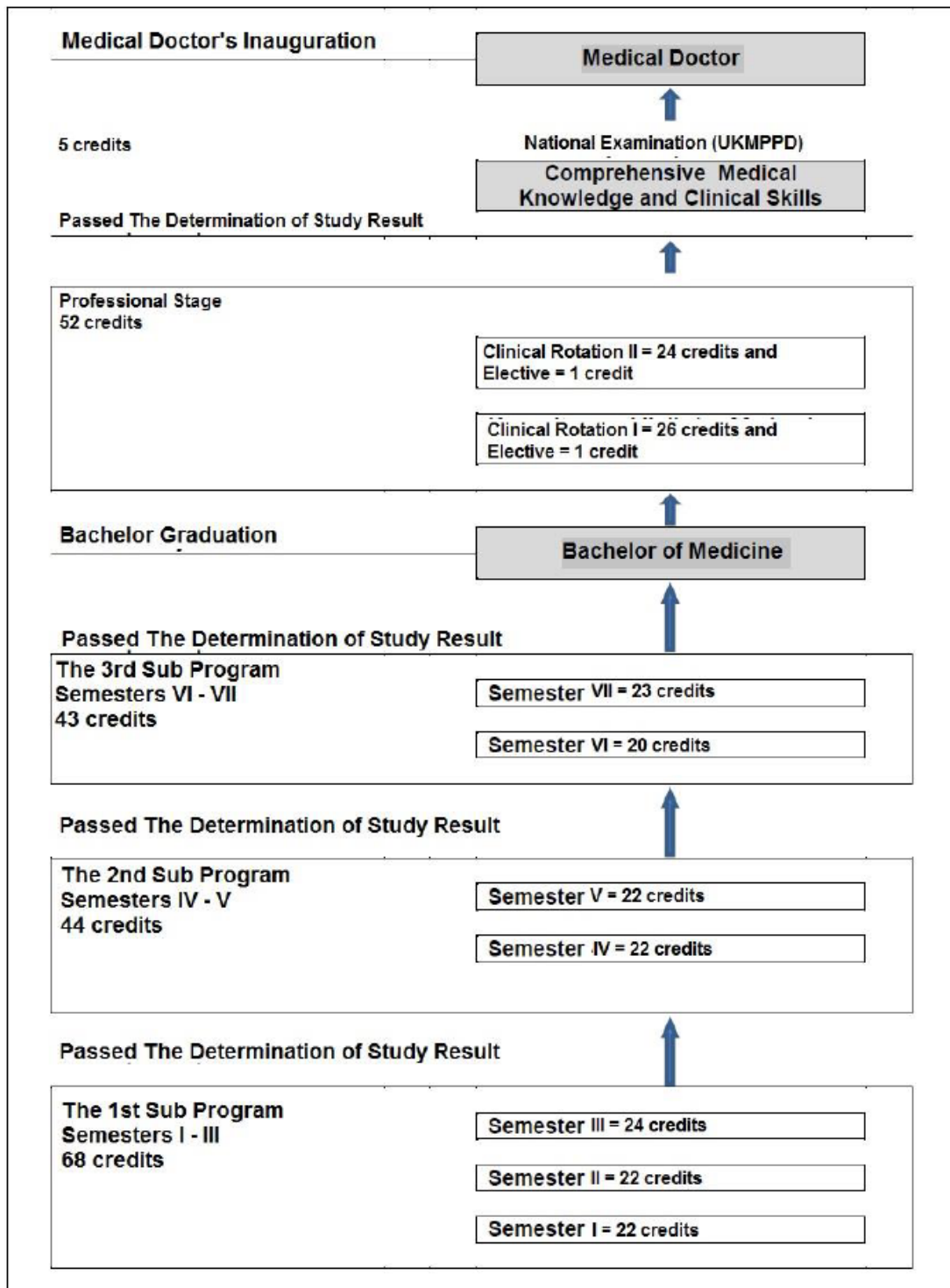
### **Criterion 2.6 Curriculum structure composition and duration**

#### **Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

#### **Preliminary assessment and analysis of the peers:**

The Medical Programme consists of two stages: The academic (Bachelor's) stage, which is designed for 7 semesters with 203.86 ECTS, and the professional (Medical Doctor) stage, which encompasses 4 semesters with 120.4 ECTS.



Source: Self-Assessment Report, UNAIR

The academic stage is carried out in the form of courses, which are divided into 3 sub-programmes. Sub-programme 1 (semesters 1 – 3) includes the study of behavioural, social, and basic biomedical sciences. Sub-programme 2 (semesters 4 + 5) is a bridge to the clinical stage with integration courses based on the human body system using a problem based approach. Sub-programme 3 (semesters 6 + 7) prepares students for clinical practice at the



professional stage and includes electives to accommodate the special interests of the students. Students need to pass one sub-programme before continuing to the next sub-programme. After passing the academic stage, students are registered to the professional stage (4 semester). The learning process at the professional stage focuses on clinical sciences. An elective course is available at the end of the first and the second year based on student's interest.

The Master's Programmes Basic Medical Science and Tropical Medicine are each designed for 4 semesters with a maximum length of studies of 4 years. The Master's Programme in Basic Medical Science includes 41 credits (99.14 ECTS). These credits are divided into 75 % lectures and 5 % practical work within the first year, as well as 20 % thesis and publication in the second year. The programme offers 8 medical specialisations: Anatomy and Histology, Physiology, Biochemistry, Pharmacology, Pathobiology, Medical Microbiology, Parasitology, and Medical Laboratory.

The curriculum of the Master's Programme Tropical Medicine is divided into two major areas of interests: Epidemiological Tropical Medicine (89.43 ECTS) and the Clinical Tropical Medicine (85.67 ECTS). This programme consists of main courses (general and specific skills) and elective courses. The first year comprises general and specific scientific skills, whereas in the second year the research activities are carried out. The electives are allocated in the second semester. Courses are delivered in the form of lectures, laboratory work as well as field practice (in hospitals and health community centres).

The auditors analyse the module descriptions and observe that they do not include all necessary information. First, the module descriptions do not contain any information about the number of contact hours, the time for self-study and the methods of teaching (lectures, tutorials, seminar, and small group teaching). Thus, the students' total workload and the conversion into ECTS is not transparent.

### **Criterion 2.7 Programme management**

#### **Evidence:**

- Self-Assessment Report
- Discussions during the audit
- Academic Study Guides

#### **Preliminary assessment and analysis of the peers:**

The Faculty of Medicine manages all three degree programmes under review. For further developing the programmes according to national and international standards, workshops

with internal (students and lecturers) and external stakeholders (alumni, representatives of professional associations, and regional health officials) are regularly conducted. The curriculum design is then reviewed by the Dean and the Curriculum Review Team. The main task of this team is to review and provide suggestions to the proposed curriculum. The reviewed curriculum is submitted by the Dean to the Faculty Consideration Board (Badan Pertimbangan Fakultas/BPF), which gives a letter of recommendation to the Dean prior to submission to UNAIR's Rector.

The further details are regulated in the Academic Study Guides.

### **Criterion 2.8 Linkage with medical practise and the health sector**

#### **Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

#### **Preliminary assessment and analysis of the peers:**

Students at the Faculty of Medicine learn from the beginning of their studies how to interact with patients and doctors in hospitals or community centres. The peers confirm that there is a strong cooperation with hospitals, public health centres, and the regional health offices.

#### **Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 2:**

The peers thank the Faculty of Medicine for clarifying that since 2017/2018 there was a special programme for students who graduated in health sciences (not medical doctor) to provide the necessary knowledge in biomedical sciences required for the courses in the Master's programme of Tropical Medicine. This preparatory programme was carried out one month before the academic year started. It included courses in Basic Molecular Biology, Basic Immunology, Basic Pathology, and Basic Epidemiology. However, since 2019/2020 graduates from health sciences can only enrol in the specialisation Epidemiology of Tropical Medicine and not in the specialisation Clinical Tropical Medicine anymore. As a result, the preparatory programme was cancelled.

The peers appreciate that students in the Medical Programme gain clinical experience through contact with patients in relevant clinical setting since their first year and that the proportion of the clinical exposure in academic stage has been increased during the last

years. Nevertheless, the peers still hold the opinion that the share of planned patient contact and the clinical exposure in relevant clinical settings should be further increased, because it is still low in comparison with international standards for medical programmes.

The peers consider criterion 2 to be mostly fulfilled.

### 3. Assessment of Students

#### Criterion 3.1 Assessment methods

**Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Academic Study Guides
- Discussions during the audit

**Preliminary assessment and analysis of the peers:**

The methods of assessment and the weighting, if there is more than one component for each study-unit, are indicated in the respective module description and are announced to the students at the beginning of each semester. The grade for each class takes into account all assessment components. There are few students whose performance fails to reach the minimum standards, who are then required to retake the exams or to repeat the whole course. The regulations allow students to repeat a course as often as he or she wants. However, the peers notice that the Academic Study Guide for the Medical Programme – at least the English translation available to them - does not explain coherently how many re-sits are possible. As the programme coordinators explain, an exam can be repeated twice, while the last resort is to repeat the course. To this end, the Faculty of Medicine offers a special lecture programme in the semester break, which allows students to repeat the course without losing a whole semester. Students are informed at the beginning of the semester about the exam schedule and the possibility of re-sits. Nevertheless, the peers insist that the English translation of § 3 of the Academic Study Guide needs to be re-worded in order to make the regulation transparent and comprehensible for all stakeholders.

Assessment methods in the Medical Programme depend on the intended learning outcome of each course. They include written exams, essays, practical examinations, e-exams, IT-based simulation, oral examinations, practical skills examination, thesis, and objective

structured clinical examination (OSCE). In addition, students have to complete the Community Service, which is assessed by a field supervisor (lecturer), who serves as a student's field mentor and assessor. The evaluation is based on a work plan, discipline, teamwork, programme implementation, and activity report.

The evaluation of students' academic achievement in the Medical Programme is done at the end of second, fourth, and eighth semester. Minimum credits and a minimum GPA need to be achieved, otherwise the student will not be allowed to continue his/her studies. Minimum credits for the second semester is 20 with a minimum GPA of 1.00, minimum credits for the fourth semester is 40 with a minimum GPA of 2.00, and minimum credits for the eighth semester is 80 with a minimum GPA of 2.00.

In the Medical Programme, there is another evaluation based on the structure of the curriculum called "determination of study result and judicium". The determination of the study result is conducted at the end of the third and fifth semesters. The judicium is performed at the end of the seventh semester before entering the professional stage. Students need to pass these evaluations (minimum credits and minimum GPA) in order to be allowed to enter the next stage of studies. In the professional stage of the Medical Programme, students are required to take a National Examination for Professional Programme (Ujian Kompetensi Mahasiswa Program Profesi Dokter/UKMPPD), which is nationally organized as an exit exam. As the peers learn during the audit, students from UNAIR usually achieve very good results in the national exam, which is an advantage of the Medical Programme. Overall, throughout the 11 semesters of training, appropriate assessment processes ensure that only students whose performance, skills, competences, attitudes, and behaviours meet the standards required of a practising medical doctor are able to complete the Medical programme.

The examination methods in the Master's programmes are similar, although the minimum GPA needed for graduation is 3.00. In most of the assessments, open-ended questions are used and students are expected to find adequate literature to answer the questions. The final score of each course is calculated from the score obtained in the final exam and from continuous soft-skill assessment (discipline, teamwork, and attitude).

The thesis proposal is evaluated by the examination team, which consists of a minimum of 5 people, included 2 supervisors. After finishing the research, the thesis can be finalized, then the examination is conducted (again) by the examination team. Students are also obliged to publish their research results in a national or international journal.

Students are allowed to take part at the final exam at the end of the semester, if they have attended at least 75 % of lecture sessions and 100 % of practical activities/tutorial/clinical skill practice unless they have important reasons for their absence. Accepted reasons are

(a) medical condition (proven by a medical letter), (b) assigned in curricular and extra-curricular events out of campus, and (c) have other reasons that are approved by the Dean/Rector.

The course assessment is conducted according to the academic calendar, which is available to all students through UNAIR's webpage. In addition, date and time of each exam are announced by every lecturer at the beginning of each course. The final marks must be uploaded to the Universitas Airlangga Cyber Campus (UACC) within two weeks after the final exam. Students can access their marks through UACC and they are allowed to complain to the course coordinator. The course coordinator must process the students' complaints within 7 days.

The peers also inspect a sample of examinations and project papers and are overall satisfied with the general quality of the samples. They conclude that the examinations are suitable to verify whether the intended learning outcomes are achieved or not.

### **Criterion 3.2 Relation between assessment and learning**

#### **Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

#### **Preliminary assessment and analysis of the peers:**

Forms of assessment include written examinations (multiple choice questions, essays), oral examinations, clinical and practical examinations, and the Objective Structured Clinical Examination (OSCE).

In all three programmes under review, assessments are conducted in accordance with the intended learning outcomes. For example, for several basic biomedical courses in which the level of competency focuses on understanding, the assessment methods are multiple choice tests and laboratory examinations. Moreover, for courses with a focus on clinical skills, the chosen assessment method is usually a practical skills examination or OSCE.

The methods of assessment are indicated in the module descriptions. In addition, the examination form is communicated to the students at the beginning of the course.

**Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 3:**

The peers confirm that the English translation of § 3 of the Academic Study Guide has been re-worded and that the regulation is now transparent and comprehensible for all stakeholders.

The peers consider criterion 3 to be fulfilled.

## 4. Students

### Criterion 4.1 Admission policy and selection

**Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

**Preliminary assessment and analysis of the peers:**

As described in the Self-Assessment Report, admission to the Medical Programme is based on a selection process at national and university level. The national selection is divided into 2 categories: Seleksi Nasional Masuk Perguruan Tinggi Negeri (SNMPTN) and Seleksi Bersama Masuk Perguruan Tinggi Negeri (SBMPTN), while the university selection is called independent (Mandiri) selection. UNAIR has set the quota for SNMPTN, SBMPTN, and Mandiri selection at 50 %, 15 %, and 35 %.

The peers point out that there are some inconsistencies in the Self-Assessment Report and the provided data with respect to the admission quota for SNMPTN, SBMPTN, and Mandiri selection for the Medical Programme. To this end, they expect the Faculty of Medicine to submit additional information on how many students are admitted through which selection method.

The selection methods are:

1. National Entrance Selection of State Universities (SNMPTN), a national admission system, which is based on the academic performance during the high school.

2. Joint Entrance Selection of State Universities (SBMPTN). This national selection test is held every year for university candidates. It is a nationwide written test (subjects: mathematics, Bahasa Indonesia, English, physics, chemistry, biology, economics, history, sociology, and geography).

3. Mandiri selection has similar requirements as the SBMPTN, it is a written test and is specifically conducted at UNAIR.

Admission to the Master's Programme Basic Medical Science as well as to the Master's Programme Tropical Medicine is based on general and specific requirements:

A. General Requirements for the Master's Programmes:

1. Indonesian or foreign students who have met the requirements of the applicable legislation and rules.
2. Bachelor degree graduates from accredited public or private universities.
3. Graduates from international Bachelor's degree or Master's degree programmes must hold an overseas diploma equivalency.
4. International applicants must provide a recommendation letter from the Indonesian Embassy in the student's country of residence.

B. Specific Requirements for Master's Programmes Basic Medical Science and Tropical Medicine:

1. Grade Point Average (GPA) of Bachelor degree preferred to be 2.75 or higher.
2. Originated from Bachelor degree in the following areas: Medicine, Dentistry, Veterinary, Pharmacy, Nursing, Public Health, Education for Midwives, Biology, Chemistry, Health laboratory diploma or other degrees.
3. Has a draft of research proposal including the amount of costs and its source.
4. Pass admission tests, including Academic Potency Test (Tes Potensi Akademik/TPA) that consists of verbal, numeric, and logical competencies; English test; and interview.
5. Pass general medical check up

Students can apply online at UNAIR for admission to the Master's programmes. Candidates are required to have a Bachelor's degree with a GPA of  $\geq 2.75$  and to go through an inter-

view process at the Faculty of Medicine. During the discussion with the peers, the programme coordinators explain that the applicants are asked about their commitment and motivation for applying for the Master's programmes, about their academic and professional background as well as their social activities. The result of the interview is documented in an official report sheet. The peers notice that the interview is currently conducted by just one teacher and that it would be more appropriate to have at least two interviewers for each applicant. This way, the out-come of the interview will be impartial.

In addition, applicants need to submit verification of English proficiency (e.g. TOEFL) and of sufficient academic ability (Academic Potential Test (TPA)). The schedule of admission, the requirements, and the procedures are published and can be accessed via UNAIR's homepage.

There is a tuition fee for the medical programmes. In the Bachelor's programme there are six different levels (from 0 to 25 Mill IDR ~ 1600€ per semester) depending on the economic background of the students. The tuition fee in the Master's programmes Basic Medicine and Tropical Medicine is 8.5 Mill IDR ~ 550€ per semester for Indonesian students. International students have to pay a higher tuition fee of 22.5 Mill IDR ~ 1450€. The details are published on UNAIR's webpage.

There is no gender discrimination, as currently around 65 % of the students are female.

As the peers learn during the audit, it is possible for disabled students to enter the Faculty of Medicine, but some disabilities are not accepted e.g. total color-blindness. These students are offered places in other degree programmes where such disabilities are not impairing students as much as in the medical programmes.

The details of the application process at UNAIR and further information on admissions criteria and deadlines can be found in the National Regulation No. 2, 2015 and the Academic Guidelines, which is also published on the university's webpage.

In summary, the auditors find the terms of admission to be binding and transparent.

### **Criterion 4.2 Student intake**

#### **Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions



- Discussions during the audit

### **Preliminary assessment and analysis of the peers:**

The annual intake quota of the Medical Programme is 250 students, with a small positive deviation to outbalance possible withdrawals. The number of applicants exceeds by far the number of available places. For example, in 2018, there were 9939 students applying for admission to the Medical Programme and only 256 new students were accepted. This is equivalent to an admission rate of only 2.6 %. The numbers in former years are similar.

The peers inquire why there are so many students applying for studying at UNAIR. They learn that medicine is a very popular subject because the employment prospects are very good and medical doctor is a very prestigious occupation. In addition, there are many high school graduates in Indonesia and UNAIR is one of the most prestigious universities in the country. Consequently, UNAIR is able to only accept the very best candidates. From their discussion with the students, the peers gain the impression that the admission system is very effective and only very motivated and high-performing candidates are admitted. The peers consider the highly selected and motivated students to be one of the strong assets of the Medical Programme.

The capacity of the Master's programme Basic Medical Science is 42 students per academic year. However, the number of applications and of accepted students is well below the maximum intake. In 2016, there were 23 applications, of which 21 were accepted. In 2018, 24 students applied and 20 of them were admitted.

Master's students are often employed as staff members in one of the departments of the Faculty of Medicine but are not allowed to teach students without a Master's degree. In order to qualify as a teacher they need to complete the Master's programme. While doing so, they are exempted from working until they have finished the programme.

The capacity of the Master's programme Tropical Medicine is 15 students per academic year. Nevertheless, only around half of the places are occupied by students. The only exception was in 2017, when there were 15 applications, of which 13 were accepted. The programme coordinators explain that several private Indonesian Universities were founded within the last few years that offer medical programmes with lower tuition fees and acceptance criteria. For this reason, it has become more competitive for UNAIR to attract highly qualified students for the Master's programmes.

The schedule of admission, the requirements, and the procedures are published and can be accessed via UNAIR's homepage.

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| <b>Criterion 4.3 Student counselling and support</b> |
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**Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Academic Study Guides
- Discussions during the audit

**Preliminary assessment and analysis of the peers:**

UNAIR offers a comprehensive advisory system for all students. At the start of the first semester, every student is assigned to an academic advisor. Each academic advisor is a member of the academic staff and is responsible for a group of approximately 20 students from his classes (in the Medical Programme) or a group of approximately 10 students from his classes (in the Master's Programmes). He is a student's first port of call for advice or support on academic or personal matters and is obliged to meet his students at least four times per semester.

The role of the academic advisor is to help the students with the process of orientation during the first semesters, the introduction to academic life and the university's community, and to respond promptly to any questions. They also offer general academic advice, make suggestions regarding relevant careers and skills development and help if there are problems with other teachers. The students confirm during the discussion with the peers that they all have an academic advisor, that they meet regularly, and that they can always contact their advisor personally and ask for help or advice.

In addition, every student who enrolls for the thesis courses will be assigned a thesis supervisor. The role of the thesis supervisors is to help students to complete their thesis research; they also monitor the progress of thesis in order to ensure the completion of the thesis in the intended amount of time. Each student will have two thesis supervisors, who are experts from related departments, who provide full guidance in carrying out the thesis, starting from finding research idea, writing proposal, conducting research activities, writing the report, and preparing an article for publication.

All students at UNAIR have access to the digital platform UACC. The students' profiles (student history, study plan, academic transcript and grade point average/GPA, lecturer evaluation, course list) are available via UACC.

There is also medical and social support for students at UNAIR and the Center for Career Development and Entrepreneurship (PPKK) offers a career counselling service. This centre

organises the Airlangga Career Fair and Entrepreneur Expo every semester by inviting companies/institutions, so that students may discuss their career interests and submit their job applications directly.

The peers notice the good and trustful relationship between the students and the teaching staff; there are enough resources available to provide individual assistance, advice and support for all students. The support system helps the students to achieve the intended learning outcomes and to complete their studies successfully and without delay. The students are well informed about the services available to them.

The only weak point the peers notice in an otherwise very comprehensive advisory system is the lack of institutionalised psychological support for students. As the stress for the students during their medical education is rather high, there is always the danger of a psychological breakdown or burnout. The students confirm during the discussion with the peers that these problems exist and that they can receive help if they specifically ask for it. However, students have to make the first step and need to seek actively for psychological support. For this reason, the peers are convinced that it would be useful to establish a point of contact for helping students with psychological problems. The respective contact should be made known to all students.

### **Criterion 4.4 Student representation**

#### **Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

#### **Preliminary assessment and analysis of the peers:**

Curriculum design, monitoring, and evaluation is carried out by a Curriculum Development Team, its members are appointed by the Dean. Students are not only members of the Curriculum Development Team but they are also involved in the curriculum design, accreditation, and the annual evaluation process. This applies to undergraduate as well as Master's students.

In addition, the Faculty of Medicine provides support, funding, and facilities for non-academic students' activities. Non-academic activities include student activities and student

organizations at local, national and international levels. These activities aim to develop students' interests and talents to improve their skills. For example, there are students' clubs for music, theatre, dancing, and sports.

The peers observe that students at the Faculty of Medicine are involved in the quality assurance process and thus actively participate in evaluating and further developing the medical programme. The Student Council of the Faculty of Medicine is consulted when changes are proposed; there are student members in the legislative board and a speaker for each intake year.

In summary, the peers appreciate the comprehensive advisory system, the high availability of staff members, the good relation between students and staff members, and the involvement of the students in further developing the degree programmes.

**Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 4:**

The peers thank UNAIR for providing consistent data on the number of accepted students from each of the three different selection methods for the Medical Programme.

With respect to the admission interview for the Master's Programmes, the peers support the plans to have the interview conducted by two independent interviewers and not just one. They hope, that the responsible panel at UNAIR will approve this change.

The peers think that it is very useful to better informing students about the role of the Student Counselling Unit in helping them with psychological problems. In addition to complementing the operational procedure and flowchart of student consultation and assistance, students should also be actively informed about the existing possibilities.

The peers consider criterion 4 to be mostly fulfilled.

## 5. Academic Staff/Faculty

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| <b>Criterion 5.1 Recruitment and selection policy</b> |
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**Evidence:**

- Self-Assessment Report
- Staff handbook
- Study plans

- Module descriptions
- Discussions during the audit

### **Preliminary assessment and analysis of the peers:**

At UNAIR, staff members have different academic positions. There are professors, associate professors, assistant professors and lecturers. The academic position of each staff member is based on research activities, publications, academic education, supervision of students, and other supporting activities. For example, a full professor needs to hold a PhD degree. In addition, the responsibilities and tasks of a staff member with respect to teaching, research, and supervision depend on the academic position.

According to the Self-Assessment Report, the ratio of lecturers and active students are: Medical Programme (1 : 2.4), Master's Programme Basic Medical Science (1 : 1.2) Master's Programme Tropical Medicine (1 : 4) in the academic year 2018/2019. Resource sharing with other faculties and collaboration with other related institutions are also conducted to achieve a proper ratio.

The academic staff activity in Indonesia is called Tridharma Perguruan Tinggi, it means that lecturers have the tasks of carrying out teaching, research, and community services in accordance with their fields of expertise and provide guidance to students in order to meet their needs and interests in the education process. Non-permanent lecturers only have to teach.

As the peers learn during the audit, all teachers have a workload between 12 and 16 credits per semester (one credit equals 170 minutes of activities per week). However, the workload can be distributed differently between the three areas from teacher to teacher.

In order to broaden the students' horizon especially in the field of research and current developments, guest lecturers from both Indonesia and overseas are regularly invited. In addition, practitioners from hospitals and health care institutions are involved in the learning process, not only as lecturers, but also as supervisors in the professional stage. The guest lectures from abroad usually have research collaborations with members of the teaching staff.

The peers discuss with UNAIR's management, how new staff members are recruited. They learn that every year the faculties and departments announce their vacancies to UNAIR's management. Since UNAIR is semi-autonomous, they can decide themselves what staff members to hire. One way to recruit new teachers is to send promising Master's students from UNAIR abroad to complete their PhD and then to hire them as teachers when they complete their own studies. UNAIR also hires graduates from other universities, but it is

hard to attract them, because if they are promising at early career stages, their own university will probably already have hired them.

In summary, the peers confirm that the composition, scientific orientation and qualification of the teaching staff are suitable for successfully implementing and sustaining the degree programmes. The peers observe that the teachers are professionally qualified and their qualification profiles fit well with the focus of the degree programmes. Clinical expertise and activities are well integrated into the curriculum, which leads to a good interaction between teaching and patient care.

### **Criterion 5.2 Staff activity and development policy**

#### **Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

#### **Preliminary assessment and analysis of the peers:**

UNAIR encourages the training of its academic staff so it has developed a programme for improving the didactic abilities and teaching methods. According to the Self-Assessment Report, the Center of Innovation Studies and Certification (Pusat Inovasi Pembelajaran dan Sertifikasi / PIPS) is responsible for the development of lecturers' skills by offering courses to improve the didactic and professional skills and by assisting members of the teaching staff who are doing a PhD abroad. The departments and faculties facilitate the staff development by enabling them to participate in national and international seminars and conferences. The staff exchange programme is supported by each faculty and funded by UNAIR and the Indonesian Ministry of Research, Technology and Higher Education. Sabbatical leave is also possible, but the length of the stay may vary from one month to one year; there are funds from the Indonesian Ministry of Higher Education and UNAIR available for such stays. In last few years, some lecturers joined fellowship programmes to improve their research competencies abroad (e.g. at Nagasaki University, Maastricht University, Iowa University, Mahidol University, and Niigata University).

In addition, the Faculty of Medicine encourages their staff members to join national and international seminars, symposiums, and conferences. UNAIR provides rewards for lecturers whose articles are published in highly reputable international journals and provide training and funds for book writing and publishing.

At the Faculty of Medicine, there is also the Medical Education Research and Staff Development Unit (MERSDU), which is responsible for the further academic and didactic development of the lecturers. MERSDU is committed to support lecturers in improving their clinical teaching competences, especially for the professional stage. This unit will arrange specific training lecturers such as medical teacher training, training of tutor (TOT) and training of instructor (TOI).

The peers discuss with the members of the teaching staff the opportunities to develop their personal skills and learn that the teachers are satisfied with the internal qualification programme at UNAIR. In addition, there is an academic incentive programme for teachers. The possible financial benefits are based on research performance, academic development, tutoring, awards and teaching evaluations.

Overall, the auditors confirm that UNAIR offers sufficient support mechanisms and opportunities for members of the teaching staff who wish to further develop their professional and teaching skills.

### **Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 5:**

UNAIR does not comment on this criterion in its statement.

The peers consider criterion 5 to be fulfilled.

## 6. Educational Resources

### **Criterion 6.1 Physical facilities**

#### **Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

### **Preliminary assessment and analysis of the peers:**

Besides facilities within the Faculty of Medicine, premises for the degree programmes are provided by other institutions, such as hospitals and research laboratories with sophisticated equipment. For example, there is a large laboratory for molecular work located in Institute Tropical Disease (ITD) Universitas Airlangga. Some modern instruments for sequencing or chromatography as well as a stem cell laboratory are available at ITD. The Faculty of Medicine has the Dr. Soetomo General Hospital as its main partner, where students get in close contact with that many kinds of cases, and where patients and laboratories support the research activities. Other hospitals as well as public health centres are also involved in teaching, namely Universitas Airlangga Hospital, Haji Hospital, Soewandhi Hospital, General Hospital of Sidoarjo, and primary health care centres in Surabaya. The collaboration with provincial and city health offices and professional associations also support the educational process.

During the audit, the auditors also visited the wards, the laboratories, the skills labs, the simulation settings, and the lecture rooms in order to assess the quality of infrastructure and technical equipment. The financial resources of the university are sufficient for guaranteeing the sustenance of the medical programmes. The peers especially laud the extensive and well equipped rooms for PC based examinations as well as the good OSCE facilities. In general, there are no bottlenecks at the Faculty of Medicine with respect to resources.

### **Criterion 6.2 Clinical training resources**

#### **Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

### **Preliminary assessment and analysis of the peers:**

Students receive clinical training from the second semester of the Medical Programme. Among the imparted competencies are anamnesis skills on different cases (such as dyspnoea, infection, pregnancy, etc.), basic physical examination (such as vital sign, spine, thorax, abdomen, ENT, etc.) and invasive procedures (such as injection, intra venous-line, urethral catheter, nasogastric tube, circumcision, etc.). In clinical skills courses, students are given lectures and demonstrations by experts, followed by practical sessions, where students are divided into small groups, each supervised by an instructor. Students take turns on taking the role as a doctor or as a patient. Each group is provided with mannequin



and medical equipment according to each topic. There are hospital visit sessions to observe clinical practice at the hospital with real patients.

During the professional stage, students will receive clinical training at the teaching hospitals. Every student will follow a clinical rotation, where they will learn to handle cases with real patients under guidance and supervision of expert lecturers. Dr. Soetomo General Hospital is the main teaching hospital; Students also have opportunity to learn at Universitas Airlangga Hospital, Soewandhi Hospital, Sidoarjo General Hospital and several other health facilities, including primary health centres.

To support the learning process in the Master's Programmes, students also use primarily facilities within the Faculty of Medicine, such as discussion/lecture room, library and laboratory provided in each department. The programmes also collaborate with Dr. Soetomo General Hospital, ITD, primary health centres in East Java, and laboratories and research centres. Collaborations are not only for teaching purposes, but also for conducting research activities.

While visiting the facilities, the peers observe how the clinical teaching is conducted. The students confirm that they are taught one to one in the clinical rotations of the professional stage e.g. in an operating theatre. The number of mannequins and cadavers is sufficient for small group teaching (3 to 5 students per mannequin, 10 students per cadaver) so that the students can acquire the necessary practical skills.

In general, there are sufficient clinical training resources available for adequately teaching the students. In addition, cooperations with other medical schools in Korea and Japan for sending staff members abroad for using sophisticated instruments that are not available at UNAIR are implemented. The auditors recommend that the usage of modern media instruments (e-learning, lecture capture etc.) should be fostered.

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| <b>Criterion 6.3 Information technology</b> |
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**Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

**Preliminary assessment and analysis of the peers:**

The electronic information system at the Faculty of Medicine is managed by the Digital Data Management Unit (Unit Pengelolaan Data Digital/UPeDDi). Its goal is to be a reliable and efficient data management unit, which guarantees a high quality management information system. This should support the use of information and communications technology in the learning and teaching process at UNAIR.

Airlangga Indonesia Medical Education Network (JEMARI) is a computer network of the Faculty of Medicine that allows the management of intranet and internet access through the campus.

Airlangga Medical e-Library service is currently used by all programmes offered by the faculty of Medicine. This service can also be accessed via WiFi-hotspots and offers access to electronic journals collections, data-based information, and various international e-books.

Distance Learning is also offered at UNAIR, its application is currently under development under the supervision of the Directorate of Information System (DSI) and the Cyber Campus Team Airlangga University (CCTAU). Currently, distance learning applications, e.g. online tutorial, e-quiz, online lecture, etc., have been implemented only for some courses at the Faculty of Medicine.

Finally, there are computer facilities available at the CBT centre (Computer Based Test), which is not only used for the UKMPPD but also for computer based local exams, SBMPTN, and other study programmes such as nursing and pharmacy.

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| <b>Criterion 6.4 Medical research and scholarship</b> |
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**Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

**Preliminary assessment and analysis of the peers:**

Research and promoting students' independent scientific work is part of the learning process and is incorporated into the curriculum of all three programmes under review.

For example, students' research activities in the Medical Programme start in the fourth semester, when they start writing their research proposal. Once approved, research begins in the fifth semester. The results need to be published in a recognised journal. Master's

students prepare their research proposal from the beginning of the first semester. This policy was established to make sure that students finish their research project in time. Master's students have the same mandatory submission of a paper to a journal.

Research by lecturer and students is sometimes performed in collaboration with other institutions within or beyond UNAIR, domestic or overseas. For example, the Faculty of Medicine has signed a memorandum of understanding with Kobe University and Oita University in Japan for cooperating in research activities. For Master's students grants for research collaborations with international universities are available.

Lecturers conduct their research activities usually by involving students. Research funding is available from UNAIR, the Indonesian government, and private, national, and international institutions. Lecturers also work in international research groups and some have cooperations with private companies or research institutions in health-related projects. The research results are presented in seminars, published in books, and national and international journals.

### **Criterion 6.5 Educational expertise**

#### **Evidence:**

- Self-Assessment Report
- Discussions during the audit

#### **Preliminary assessment and analysis of the peers:**

The auditors confirm that students are generally satisfied with the teachers' expertise, delivery and support. This is verified through the course evaluations.

UNAIR recognises that not only academic performance is important for becoming a successful medical practitioner but also soft skills and behaviour skills (communication skills, teamwork, etc.) need to be imparted. UNAIR tries to cover these areas by addressing them in courses like "Medical Ethics", "Empathy, Effective Communication and Social Accountability" and especially during the Community Service. In addition, the Faculty of Medicine encourages their students to pursue extracurricular activities and develop critical thinking. The peers are satisfied with the existing opportunities.

### **Criterion 6.6 Educational exchanges**

#### **Evidence:**

- Self-Assessment Report

- Discussions during the audit

### **Preliminary assessment and analysis of the peers:**

The Faculty of Medicine encourages its students to participate in international exchange programmes and to spend some time during their studies abroad. A problem faced by students is the possible loss of study time as a consequence of spending time at other institutions. Nevertheless, internationalisation is one strategic goal of UNAIR and there is an international class in the Medical Programme. Classes are taught in English, but international students also have to learn Bahasa Indonesia, because they need to work with and treat patients in the hospitals. Around 5 international students enter the international class of the Bachelor's programme each year; UNAIR wants to increase this number until the maximum capacity is reached. Moreover, the students' English proficiency is fostered by inviting international guest lecturers and give classes in English and by offering a journal club, where advanced students present and discuss current scientific publications in English.

In the Medical Programme, there is the opportunity to recognise a stay abroad as an elective course. Collaboration agreements exist with the following universities: University of Adelaide; Erasmus University Rotterdam, University of Groningen, University of Groningen, Faculty of Medical Sciences; Juntendo University, Kobe University, Japan; Osaka University; Kaohsiung Medical University, and University of Fukui.

Achievements and competencies acquired outside the curriculum are also acknowledged by the university, as stated as the Credit Unit Achievement Regulation (Satuan Kredit Prestasi/SKP).

The academic mobility of the students is rather high. As stated in the Self-Assessment Report, in 2017 and 2018 258 Indonesian students spent some time at an international university, mainly in Malaysia, Thailand, Taiwan, and Japan but also in European countries (Netherlands, Germany, France, and Poland). The Faculty of Medicine also attracts foreign students. In 2017 and 2018, 84 international students from several European and Asian Countries attended classes of the Medical Programme.

Student exchange in the Master's Programmes is not obligatory. However, it is supported by the Faculty of Medicine. For example, the Master's Programme Tropical Medicine has recently signed a memorandum of understanding with the Faculty Tropical Medicine, Mahidol University, Thailand, which will be implemented in 2020. Moreover, the Faculty of Medicine cooperates in the area of the Master's Programmes with universities in Japan and the Netherlands (e.g. Kobe University, Ryukyus University, Erasmus University Rotterdam, and Osaka University). Financial support is available for qualified students to spend some time at these partner universities.

The academic mobility of Master's students is rather low. Only two students of the Master's Programme Tropical Medicine (1 in 2014 and 1 in 2015) and none of the Master's Programme Basic Medical Science have visited international universities.

The Faculty of Medicine encourages students to spend a few weeks abroad to experience another health care system. Such programmes usually take place during summer time when the university is in recess. Academic staff members can attend workshops and conferences abroad or can conduct their research activities at international universities.

In summary, the peers confirm that opportunities for international educational exchange for students exist. Nevertheless, the academic mobility of the Master's students is very low and the peers recommend encouraging and supporting Master's students to spend some part of their medical education abroad.

### **Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 6:**

As UNAIR points out in its statement, an e-learning system is available at UNAIR, which offers applications like vidyo, skype, google meet, microsoft meet, webex, and web meeting. Nevertheless, the peers see that these opportunities are not widely used in the three degree programmes under review and that the usage of modern media (distance learning, lecture capture, blended learning, etc.) should be fostered.

The peers support the plans of putting more effort into establishing more international cooperations and of providing better financial support for the Master's students. The peers encourage the Faculty of Medicine to further pursue this path and increase its effort of promoting academic mobility to further pursue this path and increase its effort of promoting academic mobility.

The peers consider criterion 6 to be mostly fulfilled.

## **7. Programme Evaluation**

### **Criterion 7.1 Mechanisms for programme monitoring and evaluation**

#### **Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions

- Discussions during the audit

**Preliminary assessment and analysis of the peers:**

The auditors discuss the quality management system at UNAIR with the programme coordinators. They learn that there is a continuous process to improve the quality of the degree programmes. It is carried out through internal and external evaluation. The quality assurance system is implemented at university level by the Quality Assurance Board (BPM), which is supported by the Quality Assurance Units at faculty level (SPM) and degree programme level (GPM).

Every year, each degree programme has to analyse and evaluate the quality of the learning and teaching processes through a self-evaluation report, which is submitted to the University's management. In addition to the report, there is an annual internal quality audit in order to evaluate whether the general learning objectives have been achieved. Students, supporting staff, lecturers, alumni and employers all participate at the quality audit. The auditors are particularly qualified lecturers from other faculties. The results of the internal audits are also submitted to UNAIR's management.

Moreover, in all three programmes under review, regular meetings are held at the beginning and at the end of the semester to discuss the academic calendar, curricular content, graduation rates, evaluation results etc. The meetings are attended by the Dean, the Vice Deans, the programme coordinators, and other staff members.

External quality assessment of the degree programmes is provided by the National Accreditation Agency for Higher Education (BAN-PT) every five years. This national standard of higher education was designed to encourage educational institutions to improve their performance in providing quality education services. Moreover, the objective of this standard is to support transparency and accountability in the implementation of national education system.

All three programmes under review are accredited by BAN-PT and achieved the highest level "A". In addition, the Medical Programme has been accredited by the ASEAN University Network Quality Assurance (AUN-QA) and the Indonesian Accreditation Agency for Higher Education in Health (IAAHEH).

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| <b>Criterion 7.2 Teacher and student feedback</b> |
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**Evidence:**

- Self-Assessment Report
- Study plans

- Module descriptions
- Discussions during the audit

### **Preliminary assessment and analysis of the peers:**

Internal evaluation of the quality of the degree programmes is mainly provided through student and teacher surveys. Students and teachers give their feedback on the courses by filling out the questionnaire online. Giving feedback on the classes is compulsory for the students; otherwise, they cannot access their account on the digital platform UACC. The course evaluations are held during the final exam week. Questionnaires filled out by lecturers every semester include evaluating the performance of the heads of department, and administrative staff in the department. Students' feedback includes evaluating lectures, advisors, and faculty administration.

The course evaluations are held during the final exam week. A compilation of the students' feedback is sent to the respective lecturers. As the students point out during the discussion with the peers, there is also the possibility to give a direct and informal feedback to the teacher. Nevertheless, the peers learn during the audit that the students are not informed about the results of the online-surveys. In order to close the feedback loops it is necessary to make the outcomes of the quality assurance processes, including the questionnaires, known to the students. Based on students' critique, changes in the curriculum or the course content are made in subsequent years and some teachers directly discuss with their students possible improvements. However, this feedback should be systemised and institutionalised.

### **Criterion 7.3 Performance of students and graduates**

#### **Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

### **Preliminary assessment and analysis of the peers:**

The quality of new students determines the success of the learning process and the graduates. The peers observe that the Medical Programme is very competitive and the entrance requirements are very strict. From the academic year 2014/2015 to 2018/2019, of 38,999 applicants only 1,366 were accepted. For this reason, the students are very motivated to

complete the degree programme in time and only a few (1 to 2 %) resign and do not complete the programme successfully. This indicates that the Medical Programme has a very high appeal for Indonesian and international students, verified by the high number of foreign students who study in this programme.

The average GPA of graduates (professional stage) in the last 3 years is quite high at 3.58. The average GPA for the last 3 years graduate is 3.70 in both the Master's Programme Basic Medical Science and the Master's Programme Tropical Medicine.

In the past 4 years, 83.2 % of students graduated within the expected 3.5 years (Bachelor's degree), while in the professional stage, 96.2 % of the students graduated within 2 years. The proportion of in-time graduates for the last 3 years of the Master's Programme Basic Medical Science is 22.73% and for the Master's Programme Tropical Medicine 27.6%. This low number is due to the obligation to publish a thesis. Some strategies are planned to overcome this, for example for the Master's Programme Basic Medical Science, the curriculum was changed so that the students can start their research project earlier. However, the average length of studies in both Master's programmes is 2.3 years, which is acceptable to the peers.

During the audit, the peers learn that the curricula of both Master's programmes were changed last year with the aim of prolonging the time for research and publication from one to two semesters. In addition, Master's students are now required to submit their research proposal in the second semester. The peers acknowledge that it is the official policy of UNAIR's rectorate to expect a publication from a Master's student in order to increase the scientific output. To support these efforts, there is a specific unit at UNAIR that helps students in preparing their publication so that the whole process is sped up. However, the peers point out that quality is more important than quantity and it would be more useful to put a stronger emphasis on publishing in international journals of repute. This would also help to reduce the costs for publishing the papers. During the discussion with the peers, the students point out that they have to pay for the publication and that it would be useful if they would receive financial support from UNAIR to this end. The peers support this opinion and recommend offering financial support to students for publishing their research results.

In the last 3 years as many as 100 % of the graduates found a job within a waiting period of less than 6 months. All of them are employed in their area of expertise. This is due to the government policy that requires the medical doctor graduates to undergo an internship programme for one year and receive a salary from the government according to standard payment. The very good job prospects of the graduates are one of the strong points of the medical programmes.



The quality of graduates is not only measured by the final grades but also by the satisfaction of the employers (from hospitals, research institutions, universities, or private companies). Tracer studies on stakeholders show a satisfaction rate between 70 and 85 %. Criteria are ethics, general competence, foreign language skills, use of information technology (IT), communication, teamwork, and self-development.

In general, the employers confirm during the discussion with the peers, that they are very satisfied with the qualification profile of the graduates, especially of the Medical Programme. Moreover, they point out that the demand in Indonesia for medical doctors is very high and still growing. More hospitals are going to be built, especially in more remote areas, thus, more medical doctors are needed.

### Criterion 7.4 Involvement of stakeholders

#### **Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

#### **Preliminary assessment and analysis of the peers:**

Monitoring and evaluation activities in the three degree programmes under review involve lecturers, students, alumni, and employers. Feedback is given by filling out questionnaires, both online and offline. The external stakeholders of the three degree programmes are regularly consulted via tracer studies. In the course of these studies, alumni and the employers gave some valuable input regarding the curriculum, the facilities and the technical equipment of the research laboratories. The satisfaction of the external stakeholders is usually high to very high and the comments are used for improving the degree programmes. For example, based on the tracer study the curriculum of the Master's programmes was changed to give students more time for research activities and publications.

The Faculty of Medicine tries to stay in contact with the alumni and uses them for expanding the cooperation between FMUA and the local health service centres. In addition, alumni have built the Ksatria Airlangga Floating Hospital, using funds from alumni and donors. The Ksatria Airlangga is a 27 meter long and 7.2 meter wide ship equipped with medical equipment with the main purpose to dedicate itself to health services and community service in remote areas of the Indonesian archipelago.

The peers learn from their discussion with representatives of UNAIR's partners from public institutions and private companies that there are regular workshops with the partners on faculty level, where they discuss the needs and requirements of the employers and possible changes to the degree programmes. As the peers consider the input of the employers to be very important for the further improvement of the degree programmes, they appreciate the existing culture of quality assurance with the involvement of all stakeholders in the quality assurance process.

In summary, the peer group confirms that the quality management system is suitable to identify weaknesses and to improve the degree programmes. All stakeholders are involved in the process.

**Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 7:**

The peers expect that the Faculty of Medicine will incorporate students in the feedback system on the course evaluations (questionnaires on cybercampus) and that they will receive meaningful documents in the course of the fulfilment of requirements.

The peers see that UNAIR has established the policy that in every publication the supervisor will be a corresponding author. Thus the money for publication payment, will be reimbursed by UNAIR. However, the peers point out, that this should also be possible for publications in reputable international journals.

The peers consider criterion 7 to be mostly fulfilled.

## 8. Governance and Administration

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| <b>Criterion 8.1 Governance</b> |
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**Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

**Preliminary assessment and analysis of the peers:**

As described in the Self-Assessment Report the governance of UNAIR refers to the standard structure as determined by the University's management. The highest decision making board at UNAIR is the University Senate, which is headed by the Rector.

At faculty level, the Dean is assisted by three Vice Deans. Each degree programme is led by the Coordinator of Study Programme (KPS). In general, the governance system of the Faculty of Medicine follows the organizational structure that has been standardised by UNAIR.

The KPS coordinates the implementation of the respective degree programme activities, while he is assisted by the Quality Assurance Unit in monitoring and evaluating the outcome. Lecturers' briefing is done through coordination meetings at the beginning of the semester and evaluation meetings at the end of the semester. Communication with students is done through a meeting between the KPS and the student representatives at the beginning of the semester.

Management of the educational resources and processes in the Master's Programmes is conducted centrally by the vice deans. The KPS of the Master's Programmes can make suggestions to the vice deans, while the requirements of the teaching staff are coordinated with the head of the affiliated departments.

The peers confirm that the Faculty of Medicine has a well-defined structure of governance, which includes representatives from all stakeholders.

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| <b>Criterion 8.2 Academic leadership</b> |
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**Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

**Preliminary assessment and analysis of the peers:**

The academic leaders at UNAIR are the Deans. The Dean chairs the Faculty Consideration Board (Badan Pertimbangan Fakultas/BPF) and refers academic matters to the University Senate, of which he is a member.

At programme level, the KPS has the function of leading the implementation of educational processes, research activities, community service, and fostering the cooperation with the community and the administrative staff.

In addition, the KPS regularly monitors and evaluates students' performance and the result of academic and non-academic staff evaluations, and uses this feedback for improving the degree programme.

### **Criterion 8.3 Educational budget and resource allocation**

#### **Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

#### **Preliminary assessment and analysis of the peers:**

The Medical Programme, as well as the Master's Programme Basic Medical Science and the Master's Programme Tropical Medicine are fully supported by UNAIR and the Faculty of Medicine. Most of UNAIR's funding is covered by the central and regional governments (mostly in the form of lecturers and education staff salaries, research funds and scholarship assignments) and tuition fees. Moreover, the Faculty of Medicine participates in projects with private companies to supplement its revenues. Currently, the Faculty of Medicine is actively trying to increase the funding by developing its own businesses. These activities are supported and coordinated by the Academic Business Unit (Satuan Usaha Akademik/SUA).

As the peers learn during the discussion with UNAIR's management, around 40 % of UNAIR's total budget comes from the Indonesian government (Ministry of Education) the rest is mostly derived from tuition fees (70 %) and some from private companies or other institutions.

All revenues are centralized at the University and then distributed to the faculties according to their financial needs. Each Department and each Faculty presents an annual budget plan so that the UNAIR's Finance Office can design a budget for the whole University. Managing the funds of each degree programme is the sole task of the Vice Dean for Resources, Finance and Information Systems.

### **Criterion 8.4 Administrative staff and management**

#### **Evidence:**

- Self-Assessment Report

- Study plans
- Module descriptions
- Discussions during the audit

### **Preliminary assessment and analysis of the peers:**

Non-academic staff consist of administration staff, librarians, and technicians (laboratory assistants, technicians, analysts, and IT-experts). The Faculty of Medicine usually directly recruits administrative and supporting staff members.

The Faculty of Medicine supports the non-academic staff members in increasing their qualifications and competencies. For this reason, different training is offered: training in archive management, workshops on rules and contracts, teamwork training and self-development, office administration technical training, and computer courses.

For the further enhancement of skills, the Faculty of Medicine regularly organises specialised skills training such as procurement of goods and services, laboratory training, and computer training. All staff members are involved in internal monitoring and evaluation of the degree programmes.

### **Criterion 8.5 Interaction with health sector**

#### **Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

### **Preliminary assessment and analysis of the peers:**

The programme coordinators point out that the Faculty of Medicine has a strong working relationship with the health sector in Indonesia. The cooperation exists mainly in the fields of education, research, community service, and medical technology. Collaboration with East Java Health Office enables students to study at affiliated hospitals and public health centres. This offers additional opportunities to improve the learning process, especially in terms of hands-on experience with patients. To foster research and social activities, the Faculty of Medicine collaborates with other medical faculties and health institutions, such as the Centre for Pest Control in Pasuruan, East Java.

In particular, the cooperation with the Institute for Tropical Disease (ITD) for conducting research activities in the area of tropical diseases is a strong point of the Faculty of Medicine.

In summary, the peers conclude that the Faculty of Medicine has an excellent reputation as one of the best medical faculties in Indonesia, that cooperation with alumni is good, and that employers are very satisfied with the qualification profile of the graduates.

### **Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 8:**

UNAIR does not comment on this criterion in its statement.

The peers consider criterion 8 to be fulfilled.

## 9. Continuous Renewal

### **Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

### **Preliminary assessment and analysis of the peers:**

As described in the previous chapters, continuous renewal of the three degree programmes under review is an essential part of quality assurance system at the Faculty of Medicine.

For example, there is a continuous process at UNAIR in order to improve the quality of the degree programmes, which is carried out through internal and external evaluation. Internal evaluation of the quality of the degree programmes is mostly provided through students' feedback and quality audits. In addition, alumni and employers' surveys are conducted. The peers appreciate that the Faculty of Medicine stays in close contact with its alumni and uses their expertise and feedback for further developing the degree programmes.

Moreover, UNAIR collects data about applications, enrolment and academic results. These indicators are used to analyse the programme's success and if deficits are found, they are addressed.

As an overall judgement, the peers generally find that continuous monitoring and renewal is indeed taking place and that most of the quality assurance loops are closed. Furthermore, the peer group confirms that the quality management system is suitable to identify weaknesses and to improve the degree programmes. The stakeholders are involved in the process.

**Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 9:**

UNAIR does not comment on this criterion in its statement.

The peers consider criterion 9 to be fulfilled.

## D Additional ASIIN Criteria

### Criterion D 1.2 Name of the degree programme

#### Evidence:

- Self-Assessment Report
- Study plans
- Discussions during the audit

#### Preliminary assessment and analysis of the peers:

The peers consider the original Indonesian names as well as the English translations of the Medical Programme (Program Studi Kedokteran), the Master's Programme Basic Medical Science (Program Magister Ilmu Kedokteran Dasar), and the Master's Programme Tropical Medicine (Program Magister Ilmu Kedokteran Tropis) to be in line with the intended learning outcomes and the curricular content.

The title awarded to graduates of the undergraduate programme (academic stage) of the Medical Programme is Sarjana Kedokteran (Bachelor of Medicine), which is followed by the professional stage, which awards a Doctor (Medical Doctor). Graduates of the Master's Programme Basic Medical Science receive the title Magister Sains (Master of Science), and graduates of the Master's Programme Tropical Medicine receive the title Magister Kedokteran Tropis (Master Tropical Medicine).

### Criterion D 2.2 Work load and credits

#### Evidence:

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

#### Preliminary assessment and analysis of the peers:

Based on the National Standards for Higher Education of Indonesia (SNPT), all degree programmes use a credit point system called CSU, which is regulated as follows:



## D Additional ASIIN Criteria

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| Type of activity | Definition of 1 CSU/week/semester | Duration (min) | TOTAL (min) |
|------------------|-----------------------------------|----------------|-------------|
| Classroom course | Classroom meeting                 | 50             | 170         |
|                  | Structured task                   | 60             |             |
|                  | Independent work                  | 60             |             |
| Practical course | Practical work                    | 170            | 170         |
| Seminar          | Seminar meeting                   | 100            | 170         |
|                  | Independent work                  | 70             |             |

In comparison to ECTS credit system, wherein 1 ECTS equals 25-30 hours of students' workload per semester, it is determined that 1 CSU is awarded for 170 minutes of workload per week and the relation between the different kind of learning (contact hours, self-studies) is fixed.

The peers point out that it will be necessary to introduce (in addition to the described Indonesian system) a credit point system that is based on the students' total workload. It would be most useful to adopt the European Credit Transfer System (ECTS). In the ECTS, 25 - 30 hours of students' workload (including lecture hours and self-study hours) are equivalent to 1 ECTS credit. The peers stress that the students' total workload in hours also needs to be indicated in the module descriptions and the distinction between classroom work and self-study should be made transparent.

During the discussions with the programme coordinators and the students, the peers learn that so far there has been no survey asking the students to evaluate the amount of time they spend outside the classroom for preparing the classes and studying for the exams. Since this is necessary in the ECTS framework, the peers suggest asking the students directly about their experiences. This could be done by including a respective question in the course evaluations. The peers point out that the Faculty of Medicine should follow the ECTS users' guide, while determining the students' total workload. This is the time students typically need to complete all learning activities (such as lectures, seminars, projects, practical work, self-study and examinations).

In other words, a seminar and a lecture may require the same number of contact hours, but one may require significantly greater workload than the other because of differing amounts of independent preparation by students. Typically, the estimated workload will result from the sum of:

- the contact hours for the educational component (number of contact hours per week x number of weeks)

## D Additional ASIIN Criteria

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- the time spent in individual or group work required to complete the educational component successfully (i.e. preparation beforehand and finalising of notes after attendance at a lecture, seminar or laboratory work; collection and selection of relevant material; required revision, study of that material; writing of papers/projects/dissertation; practical work, e.g. in a laboratory)
- the time required to prepare for and undergo the assessment procedure (e.g. exams)

Since workload is an estimation of the average time spent by students to achieve the expected learning outcomes, the actual time spent by an individual student may differ from this estimate. Individual students differ because some progress more quickly, while others progress more slowly. Therefore, the workload estimation should be based on the time an “average students” spends on self-study and preparation for classes and exams. The initial estimation of workload should be regularly refined through monitoring and student feedback.

The students confirm with the peers that the workload is adequate and that the curriculum is manageable within the intended time.

In summary, the peers expect the Faculty of Medicine to verify the students’ total workload and to adjust the awarded ECTS credits accordingly.

### Criterion D 3 Exams: System, concept and organisation

#### **Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Exemplary Bachelor’s and Master’s theses
- Discussions during the audit

#### **Preliminary assessment and analysis of the peers:**

As described in the previous chapters, all three degree programmes under review comprise a thesis. During the audit, the peers also inspect a sample of final theses (Bachelor’s and Master’s) and are overall satisfied with their general quality.

### Criterion D 5.1 Module descriptions

**Evidence:**

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

**Preliminary assessment and analysis of the peers:**

While analysing the provided module descriptions, the peers note that the students' workload and the awarded ECTS credits are not mentioned in the module descriptions. In addition, the peers point out that the awarded ECTS credits and the students' workload need to be consistent and verified (see criterion D 2.2). Furthermore, the peers expect UNAIR to make the Indonesian as well as the English module descriptions available to all stakeholders, e.g. by publishing them on the Faculty's webpage.

Otherwise, the module descriptions include all necessary information about the module.

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| <b>Criterion D 5.2 Diploma and Diploma Supplement</b> |
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**Evidence:**

- Self-Assessment Report
- Exemplary Diploma Supplements for each degree programme

**Preliminary assessment and analysis of the peers:**

As the peers have pointed out before, it is necessary to award the ECTS credits for each course in accordance with the students' total workload. Although, all graduates receive a Diploma Supplement upon graduation together with a transcript of records and a diploma certificate, the provided exemplary Diploma Supplements do not mention the awarded ECTS credits. This needs to be corrected.

**Final assessment of the peers after the comment of the Higher Education Institution regarding the additional ASIIN criteria:**

The peers see that UNAIR has calculated the students' total workload (in hours) for each course, including contact hours (lectures, practical sessions, tutorials, clinical exposure, research) and self-study time (literature study, assignments, preparation for exams). This calculation has been done from the lecturer's point of view, based on several informal discussions with the students. The module descriptions and the Diploma Supplements have been updated accordingly.

#### D Additional ASIIN Criteria

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The peers confirm that the students' workload now encompasses all activities and that the ECTS credits are now awarded accordingly. They are satisfied with this calculation and the complemented module descriptions and Diploma Supplements. However, they point out that the students' workload needs to be verified regularly and that it is useful to include questions about this in the course evaluations (online questionnaires).

The peers note that in the Diploma Supplement for the Medical Programme, the section "Special skills" is incomplete. This should be corrected.

The peers consider the additional ASIIN criteria to be mostly fulfilled.

## E Additional Documents

Before preparing their final assessment, the panel asks that the following missing or unclear information be provided together with the comment of the Higher Education Institution on the previous chapters of this report:

- correct number/percentage of admission quota for the different selection methods in the Medical Programme

## F Comment of the Higher Education Institution (08.05.2020)

UNAIR provides the following documents

- Appendix 1. Modul description of Medical Programme
- Appendix 2. Module description for Mater Programme of Basic Medical Science
- Appendix 3. Module description for Master Programme of Tropical Medicine
- Appendix 4. Academic Study Guide of Medical Programme
- Appendix 5. Student Consultation Logbook
- Appendix 6. Standar Operational Procedure of Student Consultation and Assistance
- Appendix 7. Study Load of Medical Programme
- Appendix 8. Study Load for Master Programme of Basic Medical Science
- Appendix 9. Study Load for Master Programme of Tropical Medicine
- Appendix 10. Diploma Supplement for Medical Programme
- Appendix 11. Diploma Supplement for Master Programme of Basic Medical Science
- Appendix 12. Diploma Supplement for Master Programme of Tropical Medicine

and a detailed statement:

### 1. Mission and Outcomes

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| <b>Criterion 1.1 Statements of purpose and outcome</b> |
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#### **ASIIN**

The intended learning outcomes of all three degree programmes under review are mentioned in the Self-Assessment Report. They are divided between Specialist Competencies and Social Competencies. However, the peers notice that the objectives of the programmes are not listed on UNAIR's webpage. This needs to be corrected, because the intended learning outcomes should be easily accessible to all stakeholders e.g. by publishing them on the programme's website. This is also the case for the relevant information about the degree programmes (study plans, module descriptions, academic study guides). These documents should also be available in English for all stakeholders.

#### **Comment of Medical Programme, Master programmes of Basic Medical Science and Tropical Medicine**

The Objective of Study Programmes, study plans, module descriptions, and academic study guides of all study programmes have been available in English, and can be accessed easily by all stakeholders on UNAIR's webpage.

## 2. Educational Programme

### Criterion 2.3 Basic Biomedical Sciences

#### ASIIN

Since the focus of both Master's programmes is on research and on advanced clinical subjects, no classes in biomedical sciences are offered. The Master's students are expected to have acquired the necessary competences in biomedical sciences in their previous studies (they need to complete a Bachelor's or MD programme before being admitted to a Master's programme).

#### Comment of Master Programme of Basic Medical Science

Master's Program in Basic Medical Science is focusing on research and Basic medical Science, those mainly the laboratory aspects as described in every of 8 concentrations. Their competencies in Laboratory skill and knowledges, that in some aspect can support the clinical decisions. The graduates of Master's Program in Basic Medical Science are not or less learn in advance about the clinical skill. Many knowledges of clinical science are inserted in the module, but not in clinical practices. Such as the concentration of microbiology, they learn about the sign and symptoms of diphtheria cases, but they do not meet the patients in wards.

#### Comment of Master Programme of Tropical Medicine

It is correct that we expect our students have competencies in biomedical sciences in their previous studies. However, according to the education director's recommendation, lecturers' advice and students' suggestion, since 2017/2018 academic year, we provided a matriculation program for students who are graduated in health sciences (not medical doctor) to equip them to follow the courses in master programme of Tropical Medicine (MTM) well. This matriculation program is carried out for 1 month, before academic year starts. This program includes four courses as follows:

1. Basic Molecular Biology (1 credit)
2. Basic Immunology (1 credit)
3. Basic Pathology (1 credit)
4. Basic Epidemiology (1 credit)

In matriculation program, those courses accommodate the expected the basic competences not only in biomedical sciences but also in epidemiology. This information was announced at the opening of new student admission for 2017 and 2018 in website of PPBM (university entrance committee for new students).

However, in the new curriculum (implemented since 2019/2020), only medical doctor could meet the criteria as a candidate of major interest of Clinical Tropical Medicine, while graduation in health sciences can take the other major interest: Epidemiology of Tropical Medicine. (Note: In MTM there are 2 major interests: Clinical Tropical Medicine and Epidemiology of Tropical Medicine). In the new curriculum, basic epidemiology has

been included in major interest of Epidemiology of Tropical Medicine. The matriculation program is no longer available.

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| <b>Criterion 2.4 Behavioural and social sciences and medical ethics</b> |
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**ASIIN**

As described before, the focus of the Master's programmes is on research and students have already completed a Bachelor's or MD programme. Therefore, only few classes, such as "Philosophy and Research Bioethics" and "Research Methodology" are offered in the area of behavioural and social sciences. The peers consider this sufficient for Master's students.

**Comment of Master Programme of Basic Medical Science**

The curriculum of Master's Program of Basic Medical Science, there are two area of the modules, 1). General and 2). Science according to the concentration.

1). The General modules include the basic concepts in medical sciences in supporting the research. All 8 of these following modules, all as the general module to support the research.

- a). Research methodology
- b). Biostatistic
- c). Research philosophy and ethic
- d). Biomolecule and cellular biology
- e). Immunology
- f). Pathology
- g). Instrumentation and Quality Assurance in Laboratory
- h). Molecular biology

About the research topic as according to each of the 8 concentration, Anatomy-histology, Microbiology, Parasitology etc.

2). The research topics are focusing on the student's concentration.

The contents of general module, partly or most of the module, will be related to the supporting science and knowledge that contributing for conducting the research. The second one, Universitas Airlangga has the national shining points in science, namely Infectious disease, event to date expand the others, such as Stem Cell. As an example, nowadays, during the COVID-19 outbreak, our laboratory, Laboratory of Institute of Tropical Disease (ITD) was approved by Ministry of Health and Government, as one from the 3 National Laboratory centre that can conducting Laboratory examination of SARS-CoV-2 as causative agent of COVID-19. This project is conducted by one of the concentration in Basic Medical Science, namely Microbiology-Virology. The research according to this topic is also running.

**Comment of Master Programme of Tropical Medicine**



Basic competencies to conduct research have been accommodated by providing the courses: methodology of research, biostatistics, philosophy of science and bioethics. However, it is very important to equip the student with all courses for conducting research in tropical medicine (see Curriculum of MTM) well. The topic of the main courses are such as follows: epidemiology, surveillance, bacteriology – virology – parasitology of tropical medicine, zoonosis, pediatric tropical medicine, environmental health of tropical medicine; and the topics of elective courses are such as follows: tuberculosis, HIV/AIDS, malaria, dengue infection. Some of those courses are given not only in class but also in laboratory and/or field.

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| <b>Criterion 2.5 Clinical sciences and skills</b> |
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**ASIIN**

However, they notice that the share of planned contact with patients in relevant clinical settings in the academic stage of the Medical Programme (first 7 semesters) is rather low by international standards. For this reason, the peers recommend increasing the share of clinical exposure and the time students spend in planned contact with patients in the academic stage.

**Comment of Medical Programme**

The curriculum 2016 includes a learning system that allows the students to gain early clinical exposure through contact with patients in relevant clinical setting since first year. The proportion of the early clinical exposure in academic stage has been improved. Clinical exposure are given gradually increased according to the level competence should be achieved at the end of study in academic stage. Supplementing the lectures, clinical sciences and skill exposure are conducted in small group teaching through case/clinical problem based discussion, clinical skill and contact with patient/community.

Case/clinical problem based discussion has been given at semester 3 Tropical Medicine and GELS 1 blocks in for 9 hours, 10 integration blocks at semester 4 and 5 for 9 hours each block as well as GELS 2 block in semester 6 lasts for 9 hours.

Clinical skills are performed using manequin, and other tools. The clinical skills can be found in Medical Skill block 1,2,3 and 4 at semester 2, 3, 5 and 6, for 27 hours for each block. In addition, in integration blocks include Kardiorespiratory, Musculoskeletal, as well as Kidney and Urinary Tract System blocks, clinical skill have been taught for 2, 8 and 2 hours, respectively. In GELS 1 and GELS2 blocks, students learn about emergencies clinical skill for 6 hours of each blocks. At the last semester, student gets Comprehensive Clinical Skill (CCS) block for 36 hours.

Student contacts with patient are carried out through observing patient or allowed to do apply clinical skill under supervision of the lecturer/doctor in teaching/affiliation hospitals. Student also contact with the communities. Patient/community contact is conducted since semester 2 namely Empathy, effective communication, and social accountability, where

students assist the pregnant women for minimal 10 hours in 3 months period under supervision of the lecture. At Tropical Medicine block (semester 3), students perform the epidemiology survey to community in various primary care, and educate patient according to risk factors that found to carry out promotion and preventive medicine for about 3 hours. In addition, Clinical skill is also obtained in the Medical 1,2,3,4 blocks in the form of hospital visit for 6 hours per block as well as in and Kidney and Urunart Tract system block for 3 hours. Several elective block also provide student to contact with patient in other hospital, both domestic or foreign hospital.

#### **Criterion 2.6 Curriculum structure composition and duration**

##### **ASIIN**

The auditors analyse the module descriptions and observe that they do not include all necessary information. First, the module descriptions do not contain any information about the number of contact hours, the time for self-study and the methods of teaching (lectures, tutorials, seminar, and small group teaching). Thus, the students' total workload and the conversion into ECTS is not transparent.

##### **Comment of Cluster A**

The module descriptions already described brief information about the block/course. Further information usually given to the student in the beginning of each course. The study programme realized the importance of the information about students' total workload including the number of contact hours, the time for self-study and the methods of teaching, and will added it in the module description and the student guidebook as well as upload it into the website (Appendix 1-3). For the further quality development process, the study programme will do the survey to all the student to identify the students' workload for each course and use this information to improve the programme and create a constant learning.

### **3. Assessment of Students**

#### **Criterion 3.1 Assessment methods**

##### **ASIIN**

Nevertheless, the peers insist that the English translation of § 3 of the Academic Study Guide needs to be re-worded in order to make the regulation transparent and comprehensible for all stakeholders.

##### **Comment of Medical Programme**

The regulation about the exam has already re-worded, and explained as follows (Appendix 4):

- a. In each study course or block, exams are given in the form of a written test, laboratory practice, medical skill demonstration, or online. Exams are held by each course or block supervisor in the middle of or at the end of the block.
- b. The exams held are listed below:

- 1st Block Exam: Held at the end of the block
- 2nd Block Exam: Held after the 1st Block exam to give the students an opportunity to obtain the highest score possible for them
- Remedial exam: Held at the end of the semester (explained in f)
- Block exams are exams given in each respective block. Block exams are given two times with the maximum score of A (100) for the 1st Block exam and 74.9 (AB) for the 2nd Block exam. Students who are unable to take the Block I exam with a valid reason is permitted to take a make-up exam with a maximum score of A (100).
- The final score of each block is determined with or without other components of value including soft skills as decided by the head of each program.
- Remedial exam is an exam held after the block, and are obligated to be taken by students with results that are below the passing grade. The exam is held at the end of each semester after every block is completed. The maximum amount of blocks held in each semester is 4. The maximum score for a remedial exam is B (69.9), thus a student with a score below 69.9 may take the exam.
- If a student failed a remedial exam, his or her final score would be determined by the best score achieved from every exam taken in each respective course.

The study program also has the special lecture program, for students who failed after decided in determination of study result, which already described in chapter 2 of the Academic Study Guide:

Special lectures

1. Special lectures are lectures for 1 semester for students who have not passed certain subjects according to the determination of study / graduation results.
2. The number of credits in special lectures is a maximum of 24 credits per semester
3. Each course is required to be taken in a special lecture, must be followed by at least half of the total block time in a regular lecture.
4. The maximum score of each subject in a special lecture is B.

#### 4. Students

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| <b>Criterion 4.1 Admission policy and selection</b> |
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##### ASIIN

The peers point out that there are some inconsistencies in the Self-Assessment report and the provided data with respect to the admission quota for SNMPTN, SBMPTN, and Mandiri selection for the Medical Programme. To this end, they expect the Faculty of medicine to

submit additional information on how many students are admitted through which selection method.

### Comment of Medical Programme

The percentage of admission quota for the different selection methods in the Medical Programme actually differ every year, and The *Mandiri* selection, has increasing percentage year by year, since it is the independent selection from Universitas Airlangga. The change in the composition of the three selection methods is seen in Table. This policy was made by Rector based on input from faculty and stakeholder.

Table 4.1.1 History of student admission quota in Medical Programme since year 2016

| Year | SNMPTN         |          | SBMPTN        |          | MANDIRI       |          | TOTAL         |          |
|------|----------------|----------|---------------|----------|---------------|----------|---------------|----------|
|      | Quota (%)      | Accepted | Quota (%)     | Accepted | Quota (%)     | Accepted | Quota (%)     | Accepted |
| 2016 | 100<br>(43.5%) | 102      | 75<br>(32.6%) | 82       | 55<br>(23.9%) | 55       | 230<br>(100%) | 239      |
| 2017 | 87<br>(34.8%)  | 89       | 88<br>(35.2%) | 89       | 75<br>(30%)   | 80       | 250<br>(100%) | 258      |
| 2018 | 75<br>(30%)    | 75       | 100<br>(40%)  | 100      | 75<br>(30%)   | 81       | 250<br>(100%) | 256      |
| 2019 | 75<br>(30%)    | 75       | 100<br>(40%)  | 97       | 75<br>(30%)   | 81       | 250<br>(100%) | 253      |
| 2020 | 50<br>(20%)    | not yet  | 75<br>(30%)   | not yet  | 125<br>(50%)  | not yet  | 250<br>(100%) |          |

\*Source:

- Report Book from PPMB year 2017 and 2018
- website ppmb.unair.ac.id

### ASIIN

Students can apply online at UNAIR for admission to the Master's programmes. Candidates are required to have a Bachelor's degree with a GPA of  $\geq 2.75$  and to go through an interview process at the faculty of Medicine. During the discussion with the peers, the programme coordinators explain that the applicants are asked about their commitment and motivation for applying for the Master's programmes, about their academic and professional background as well as their social activities. The result of the interview is docu-

mented in an official report sheet. The peers notice that the interview is currently conducted by just one teacher and that it would be more appropriate to have at least two interviewers for each applicant. This way, the out-come of the interview will be impartial.

#### **Comment of Master Programme of Basic Medical Science**

Thank you for this concern, I have contacted to the Airlangga Center for Student recruitment (PPMB = Pusat Penerimaan Mahasiswa baru, ppmb.unair.ac.id) according to this very topic, and principally is accepted. The changes of this Procedure will be discussed in the Dean Forum as a routine monitoring the procedure of student recruitment that conducted and chaired by Rector.

#### **Comment of Master Programme of Tropical Medicine**

The suggestion is very good and potential to be implemented. We have delivered the suggestion to the University Entrance Committee for new students.

We add information that interview is one of the assessment elements (such as academic potency test and English test). The interview score will be accumulated with other values, then delivered to the team (including education director, chairman of PPMB, dean, coordinator of program) as a decision maker of acceptance (written in Guidance of Student Admission).

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| <b>Criterion 4.3 Student counselling and support</b> |
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#### **ASIIN**

The only weak point the peers notice in an otherwise very comprehensive advisory system is the lack of institutionalised psychological support for students. As the stress for the students during their medical education is rather high, there is always the danger of a psychological breakdown or burnout. The students confirm during the discussion with the peers that these problems exist and that they can receive help if they specifically ask for it.

However, students have to make the first step and need to seek actively for psychological support. For this reason, the peers are convinced that it would be useful to establish a point of contact for helping students with psychological problems. The respective contact should be made known to all students.

#### **Comment of Cluster A**

The Faculty of Medicine Universitas Airlangga (FMUA) has a unit that provides counseling and assistance for students, namely Student Counseling Unit/Bimbingan Konseling Mahasiswa (BKM). This unit coordinates with the Coordinator of Study Programme, then further coordination with the guidance lecturer, as well as the Course coordinator or relevant lecturer to identify the student who has academic and non-academic problem. In addition, psychiatrists, and neurologists, are also involved to monitor the psychological development of the student. In terms of consulting non-academic problems, students can directly contact the guidance lecturer, Coordinator of Study Programme, and Student

Counseling Unit. Student also can directly having consultation to HELP centre which is managed by the UNAIR Student Affairs Directorate. Therefore immediately action are expected can be taken if there are psychological problems. Every guidance process with the guidance lecturer should be written in the student consultation logbook and students must fill out the monitoring of study at each subprogramme. This book include the services of Student Consultation Unit and implementation guideline of student consultation process. The contact of the Coordinator of Student Counseling Unit as well as the guidance lecturer have been listed in this book (Appendix 5). However, the role of Student Counseling Unit and guidance lecturer in helping student with psychological problems are still unrecognized by students. In order to improve the psychological support for students, the standard operational procedure and flowchart of student consultation and assistance are established refers to university regulation in PP-UNAIR-KMS-01-02 (Appendix 6). These procedure and flowchart can be accessed in the website.

## 6. Educational Resources

### Criterion 6.2 Clinical training resources

#### ASIIN

To support the learning process in the Master's Programmes, students also use primarily facilities within the Faculty of Medicine, such as discussion/lecture room, library and laboratory provided in each department. The programmes also collaborate with Dr. Soetomo General Hospital, ITD, primary health centres in East Java, and laboratories and research centres. Collaborations are not only for teaching purposes, but also for conducting research activities.

In general, there are sufficient clinical training resources available for adequately teaching the students. In addition, cooperations with other medical schools in Korea and Japan for sending staff members abroad for using sophisticated instruments that are not available at UNAIR are implemented. The auditors recommend that the usage of modern media instruments (e-learning, lecture capture etc.) should be fostered.

#### Comment of Cluster A

UNAIR has been developed e-learning system, known as Airlangga University Learning Application (AULA) since 2009. This system is one of the learning supporting system in UNAIR which is educational transformation regarding to technology development. The AULA changed become e-learning UNAIR (elearning.unair.ac.id) since 2019. In addition, the Faculty also has e-learning system which completed the UNAIR e-learning. The various application that has been subscribed in Faculty e-learning namely vidyo, skype, google meet, microsoft meet, webex, web meeting. The utilization of technology and modern media will always continue to be improved. Knowledge about technological advances obtained from comparative studies to other institutions will also be applied at Medical Programme as well as Master programme of Basic Medical Science and Tropical Medicine,

if possible. E-learning UNAIR provide varying methods for online lecture, teleconference, tutorial, discussion, and exam. Nowadays, in order to minimize the spread of COVID-19 in Indonesia, Medical Programme as well as Master Programme of Basic Medical and Tropical Medicine is implementing distance learning from home since March 2019. Modern media utilization is being improved and UNAIR enhance the application to support the e-learning process. Big Blue Button (BBB) application already embedded in UNAIR's e-learning platform, and another application such as Zoom already subscribed by UNAIR.

#### **Criterion 6.6 Educational exchanges**

##### **ASIIN**

In summary, the peers confirm that opportunities for international educational exchange for students exist. Nevertheless, the academic mobility of the Master's students is very low and the peers recommend encouraging and supporting Master's students to spend some part of their medical education abroad.

##### **Comment of Master Programme of Basic Medical Science**

The student mobility is our concern. The opportunity and collaboration are widely available. As we know our student mostly having a limited funding and socio-economic. Our University has a supporting a partial grant, but still need some effort for the student. This year our university has more grant collaboration with university abroad for student exchange, even are still limited, but this will be a new competitive grant that we have.

##### **Comment of Master Programme of Tropical Medicine**

The Master Programme of Tropical Medicine has been trying to encourage and support the student in student exchange programme by assigning MoA with Faculty of Tropical Medicine, Mahidol University. Therefore, our students have higher opportunity to study partly (credit earning) abroad. The study programme will put more effort or find another way to improve this programme.

## **7. Programme Evaluation**

#### **Criterion 7.2 Teacher and student feedback**

##### **ASIIN**

The course evaluations are held during the final exam week. A compilation of the students' feedback is sent to the respective lecturers. As the students point out during the discussion with the peers, there is also the possibility to give a direct and informal feedback to the teacher. Nevertheless, the peers learn during the audit that the students are not informed about the results of the online-surveys. In order to close the feedback loops it is necessary to make the outcomes of the quality assurance processes, including the questionnaires, known to the students. Based on students' critique, changes in the curriculum or the course

content are made in subsequent years and some teachers directly discuss with their students possible improvements. However, this feedback should be systemised and institutionalised.

#### **Comment of Cluster A**

The course evaluation was embedded in the cybercampus system and filled out by students in the end of semester. The result of the evaluation course was recapitulated by the quality assurance unit in faculty level. The recapitulation of the course evaluation delivered to the Coordinator of each Study Programmes and Dean. The reports of course evaluation were explained and discussed in the annual plenary meeting among the Dean, Head of Departments, Coordinator of Unit and Coordinator of Study Programmes. Our system have not yet accommodated to close the feedback loops. According to this suggestion, we will build the system that accomodate the student feedback and inform the result to them.

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| <b>Criterion 7.3 Performance of students and graduates</b> |
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#### **ASIIN**

During the audit, the peers learn that the curricula of both Master's programmes were changed last year with the aim of prolonging the time for research and publication from one to two semesters. In addition, Master's students are now required to submit their research proposal in the second semester. The peers acknowledge that it is the official policy of UNAIR's rectorate to expect a publication from a Master's student in order to increase the scientific output. To support these efforts, there is a specific unit at UNAIR that helps students in preparing their publication so that the whole process is sped up. However, the peers point out that quality is more important than quantity and it would be more useful to put a stronger emphasis on publishing in international journals of repute. This would also help to reduce the costs for publishing the papers. During the discussion with the peers, the students point out that they have to pay for the publication and that it would be useful if they would receive financial support from UNAIR to this end. The peers support this opinion and recommend offering financial support to students for publishing their research results.

#### **Comment of Master Programmes of Basic Medical Science and Tropical Medicine**

About the publication, at this moment this issue is being a hit topic in our university. The quality looks better, as our standar of the publication. To guarantie the quality of the publication, we have a regulation that for Master's program, minimally should publish the manuscript in National accredited journal, but some effort can reach the SCOPUS or similar standards. It thus since last 2018, the publication for the student of Master's program are improved, including in the reputable journal that being university's concern.

According to the student that should pay for the journal. The publication charge are various according to the quality of journal. The payment that charged by the journal publisher are



any variation magnitude. The better quality of journal, sometimes should pay more expensive, rather than lower ones. According to this payment for publication, our university has launched the policy that every publication the supervisor will be as a corresponding author, and can be claimed the payment to the university. Thus the money that used for publication payment, will be re-imbursed by the University. This policy is eligible for all publication in Universitas Airlangga. In addition, some students have a collaborative research with their supervisors. These students' thesis research are partially/fully supported by their supervisors (funds or reagents) since sample collection until its publication. The other benefit of the collaborative thesis is usually a high quality research and potentially can be published in a (International) reputed journal. Therefore the coordinator often promotes a collaborative thesis to the students and provides information on lecturers who have research projects.

## D Additional ASIIN Criteria

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| <b>Criterion D 2.2 Work load and credits</b> |
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### ASIIN

The peers point out that it will be necessary to introduce (in addition to the described Indonesian system) a credit point system that is based on the students' total workload. It would be most useful to adopt the European Credit Transfer System (ECTS). In the ECTS, 25 - 30 hours of students' workload (including lecture hours and self-study hours) are equivalent to 1 ECTS credit. The peers stress that the students' total workload in hours also needs to be indicated in the module descriptions and the distinction between classroom work and self-study should be made transparent.

During the discussions with the programme coordinators and the students, the peers learn that so far there has been no survey asking the students to evaluate the amount of time they spend outside the classroom for preparing the classes and studying for the exams. Since this is necessary in the ECTS framework, the peers suggest asking the students directly about their experiences. This could be done by including a respective question in the course evaluations. The peers point out that the Faculty of Medicine should follow the ECTS users' guide, while determining the students' total workload.

In summary, the peers expect the Faculty of Medicine to verify the students' total workload and to adjust the awarded ECTS credits accordingly.

### Comment of Cluster A

To equalize the point of view between credit system in Indonesia and ECTS in Europe, we can calculate that 1 credit is equals with 34-40 hours of student's workload per semester (including contact hours and self-study), since the learning activity in 1 semester is held for 12 until 14 weeks.

In order to equate the student workload with ECTS number, we have calculated the real workload (in hours) for student in each course, including contact of lecture, practical session, tutorial, clinical exposure, research, self-study (literature study and assignments), and exams. This calculation have been made from lecturer's point of view, based on several informal discussions with student, and also can be compared with the concepts that stated in module description of each course.

The regularly direct observation and question about the actual workload experienced by the student is indeed needed in this case, so the Programme Coordinator knows the average of student workload in order to adjust the awarded ECTS exactly. The detail ECTS calculation according to the peer's suggestion provided in additional documents (Appendix 7-9).

#### **Criterion D 5.1 Module descriptions**

##### **ASIIN**

While analysing the provided module descriptions, the peers note that the students' workload and the awarded ECTS credits are not mentioned in the module descriptions. In addition, the peers point out that the awarded ECTS credits and the students' workload need to be consistent and verified (see criterion D 2.2). Furthermore, the peers expect UNAIR to make the Indonesian as well as the English module descriptions available to all stakeholders, e.g. by publishing them on the Faculty's webpage.

Otherwise, the module descriptions include all necessary information about the module.

##### **Comment of Cluster A**

The module description already made bilingually. The documents of each language is uploaded in the website.

#### **Criterion D 5.2 Diploma and Diploma Supplement**

##### **ASIIN**

As the peers have pointed out before, it is necessary to award the ECTS credits for each course in accordance with the students' total workload. Although, all graduates receive a Diploma Supplement upon graduation together with a transcript of records and a diploma certificate, the provided exemplary Diploma Supplements do not mention the awarded ECTS credits. This needs to be corrected.

##### **Comment of Cluster A**

The diploma supplement published by the study programme is based on the national regulation and referring to Rector Decree of Universitas Airlangga Number 35 Year 2016. All graduates receive Diploma Supplement/Supplementary Letter to University Certificate (SKPI) that contain academic achievement or a qualification of a certificate holder as well as additional information. Additional information provides information about the students achievement in both non academic and soft skill achievements during their study. Awarded

ECTS credits will be added in Diploma Supplement according to international standard and facilitate graduates to continue study abroad (Appendix 10-12).

## **E. Additional document**

### **ASIIN**

Before preparing their final assessment, the panel asks that the following missing or unclear information be provided together with the comment of the Higher Education Institution on the previous chapters of this report:

- correct number/percentage of admission quota for the different selection methods in the Medical Programme

### **Comment of Medical Programme**

The explanation and additional information same with criterion 4.1 about Student Intake

## G Summary: Peer recommendations (22.05.2020)

Taking into account the additional information and the comments given by UNAIR, the peers summarize their analysis and **final assessment** for the award of the seals as follows:

| <b>Degree Programme</b>  | <b>ASIIN seal</b>              | <b>Subject-specific labels</b> | <b>Maximum duration of accreditation</b> |
|--------------------------|--------------------------------|--------------------------------|--|
| Ba/MD Medicine           | With requirements for one year |                                | 30.09.2025                               |
| Ma Basic Medical Science | With requirements for one year |                                | 30.09.2025                               |
| Ma Tropical Medicine     | With requirements for one year |                                | 30.09.2025                               |

### Requirements

#### For all degree programmes

- A 1. (WFME 7.2) Close the feedback loops and inform the students about the results of the online teaching evaluations.

### Recommendations

#### For all degree programmes

- E 1. (WFME 2.5) It is recommended to increase the share of planned patient contact and the clinical exposure in relevant clinical settings.
- E 2. (WFME 4.3) It is recommended to better and actively inform students about the possibilities for receiving psychological support.
- E 3. (WFME 7.3) It is recommended to offer financial support for students for publishing their research results in international journals.

#### For the Master's programmes

- E 4. (WFME 4.1) It is recommended to conduct the admission interview by more than one teacher.

## H Comment of the Technical Committee 14 - Medicine (10.06.2020)

*Assessment and analysis for the award of the ASIIN seal:*

During the course of the audit, the auditors have noted particularly positively that all stakeholders (students, lecturers, employers) are satisfied with the degree programmes, especially the strictly selected and highly motivated students from all areas of Indonesia are a plus. In addition, a comprehensive advisory system and the good relations between students and lecturers are positive. Points of criticism were identified as low academic mobility, too little direct contact with patients, the lack of a Diploma Supplement and the fact that the total workload of the students is not recorded or verified. However, the university has started to take measures for improvement directly after the audit and has, for example, developed a Diploma Supplement, reviewed the workload of the students, and introduced ECTS in addition to the Indonesian credit point system. As a result, the peer group now proposes only one requirement and four recommendations. The Technical Committee follows this assessment.

The Technical Committee 14 – Medicine recommends the award of the seals as follows:

| <b>Degree Programme</b>  | <b>ASIIN seal</b>              | <b>Subject-specific labels</b> | <b>Maximum duration of accreditation</b> |
|--------------------------|--------------------------------|--------------------------------|--|
| Ba/MD Medicine           | With requirements for one year |                                | 30.09.2025                               |
| Ma Basic Medical Science | With requirements for one year |                                | 30.09.2025                               |
| Ma Tropical Medicine     | With requirements for one year |                                | 30.09.2025                               |

# I Decision of the Accreditation Commission (26.06.2020)

*Assessment and analysis for the award of the ASIIN seal:*

The Accreditation Commission discusses the procedure and decides to follow the proposal of the peer group and the TC without making any changes to the requirement or the recommendations.

The Accreditation Commission for Degree Programmes decides to award the following seals:

| <b>Degree Programme</b>  | <b>ASIIN seal</b>              | <b>Subject-specific labels</b> | <b>Maximum duration of accreditation</b> |
|--------------------------|--------------------------------|--------------------------------|--|
| Ba/MD Medicine           | With requirements for one year |                                | 30.09.2025                               |
| Ma Basic Medical Science | With requirements for one year |                                | 30.09.2025                               |
| Ma Tropical Medicine     | With requirements for one year |                                | 30.09.2025                               |

## **Requirements**

**For all degree programmes**

- A 1. (WFME 7.2) Close the feedback loops and inform the students about the results of the online teaching evaluations.

## **Recommendations**

**For all degree programmes**

- E 1. (WFME 2.5) It is recommended to increase the share of planned patient contact and the clinical exposure in relevant clinical settings.
- E 2. (WFME 4.3) It is recommended to better and actively inform students about the possibilities for receiving psychological support.

- E 3. (WFME 7.3) It is recommended to offer financial support for students for publishing their research results in international journals.

**For the Master's programmes**

- E 4. (WFME 4.1) It is recommended to conduct the admission interview by more than one teacher.

# Appendix: Programme Learning Outcomes and Curricula

According to the Self-Assessment Report, the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the Medical Programme:

“Graduate’s Profile and Learning Outcomes of Medical Programme

Graduate’s profile of Medical Programme

Conforming to the Indonesian Standard for Physician Competence/ Standar Kompetensi Dokter Indonesia (SKDI) 2012, medical doctor’s graduates are requires following profiles:

## 1. Noble Professionalism

Graduates who perform medical practice according to values and principle of the belief in The One and only God, noble morality, ethical and disciplined, aware and law-abiding, and equipped with social-cultural insights.

## 2. Long-life Learner

Graduates who recognise his/her limitations, and continuously developing him/herself and their knowledge for the sake of patient safety.

## 3. Effective Communicator

Graduates who communicate effectively with patient, family members, colleagues, and community.

## 4. Information and Health Problems Manager

Graduates who utilise health technology and information and manage health problems.

## 5. Scientific-based and Skilled Practitioner

Graduates whose implement the current scientific basis of medicine, and performing diagnostic procedures and treatment skilfully.

## 6. Excellent Graduates

Graduates who is equipped with local superiority of Faculty of Medicine Universitas Airlangga.

## 4.2. Learning outcomes of Medical Programme



In order to produce graduates with expected profiles, learning outcomes are developed which divided into 2 groups: specialist competencies and social competencies. The details are as follows:

A. Specialist Competencies

Capable of:

1. Utilizing communication and information technology, and health information for medical practice (Information Manager)
2. Solving health problems based on the latest scientific basis of medicine and health sciences to achieve optimal results (Scientific- Based Practitioner)
3. Performing clinical procedures related to health problems by implementing the principle of patients, health care providers and others safety (Skilled Practitioner)
4. Managing individual, family, and community health problems comprehensively, holistically, integrative and continuously, within the context of primary health care. (Health Problem Manager)
5. Has basic qualification as a medical doctor in accordance with Faculty of Medicine Universitas Airlangga local superiority: Tropical Medicine, Emergency Medicine and Research (Excellent Graduates)

B. Social Competencies

6. Performing professional medical practice according to religious values and principal, noble morality, ethics, discipline, laws, and socio-cultural (Noble Professionalism)
7. Being aware of one's limitation, overcoming personal problems, self-developing, continuously pursuing knowledge renewal and enhancement, as well as developing knowledge for patient safety (Self Introspection and Self Development)
8. Exchanging information through verbal and non-verbal communication with patient from all ages, family members, community, colleagues, and other professionals (Effective Communicator)"

The following curriculum is presented:

| Sub Program I   |                                  |  |                                 |   |  |  |   |   |                                |   |  |    |  |                          |                               |    |   |                              |                 |    |    |    |    |    |
|---|----------------------------------|--|---------------------------------|---|--|--|---|---|--------------------------------|---|--|----|--|--------------------------|-------------------------------|----|---|------------------------------|-----------------|----|----|----|----|----|
| Semester  | 1                                | 2                                      | 3                               | 4 | 5  | 6  | 7   | 8 | 9                              | 10                                      | 11   | 12 | 13   | 14                       | 15                            | 16 | 17  | 18                           | 19              | 20 | 21 | 22 | 23 | 24 |
| 1   | Blok MKWU                        |  |                                 |   |  |  | Foundation Course   |   |                                |   | Anatomy (4 cr)   |    |  |                          |                               |    |   |                              |                 |    |    |    |    |    |
| 22 cr   | Pancasila (2 cr)                 |  | Civics (2 cr)                   |   | Critical thinking, Study skills and Evidence Based Learning (2 cr) |  |   |   | Medical Biology (3 cr)         |   |  |    |  | Medical Histology (3 cr) |                               |    |   |                              |                 |    |    |    |    |    |
|   | Religion 1 (2 cr)                |  | Bahasa (2 cr)                   |   | Medical Ethics (2 cr)  |  |   |   |                                |   |  |    |  |                          |                               |    |   |                              |                 |    |    |    |    |    |
| 2   | Physiology (5 cr)                |  |                                 |   |  |  | Science Phylosofhy (2 cr)   |   |                                |   | Anatomic Pathology (3 cr)  |    |  |                          |                               |    |   |                              |                 |    |    |    |    |    |
| 22 cr   | Biochemistry (5 cr)              |  |                                 |   |  |  |   |   |                                |   | Clinical Pathology (3 cr)  |    |  |                          |                               |    |   |                              |                 |    |    |    |    |    |
|   |                                  |  |                                 |   |  |  |   |   |                                |   | Medical Skills 1 (2 cr)  |    |  |                          |                               |    |   |                              |                 |    |    |    |    |    |
| Empathy, Effective Communication and Social Accountability (paralel) (Pregnant women, People with disabilities, Kids with special needs) (2 cr) |                                  |  |                                 |   |  |  |   |   |                                |   |  |    |  |                          |                               |    |   |                              |                 |    |    |    |    |    |
| 3   | Microbiology (3 cr)              |  |                                 |   | Pharmacology and Treatment (5 cr)                                  |  |   |   | Public Health Science 1 (4 cr) |   |  |    | Tropical Medicine (3 cr)                                   |                          |                               |    | GELS 1 (2 cr)                             |                              |                 |    |    |    |    |    |
| 24 cr   | Parasitology (3 cr)              |  |                                 |   |  |  |   |   |                                |   |  |    | Medical Skills 2 (2 cr)                                    |                          |                               |    |   |                              |                 |    |    |    |    |    |
|   | Social Aspect of Medicins (2 cr) |  |                                 |   |  |  |   |   |                                |   |  |    |  |                          |                               |    |   |                              |                 |    |    |    |    |    |
| Sub Program II  |                                  |  |                                 |   |  |  |   |   |                                |   |  |    |  |                          |                               |    |   |                              |                 |    |    |    |    |    |
| Semester  | 1                                | 2                                      | 3                               | 4 | 5  | 6  | 7   | 8 | 9                              | 10                                      | 11   | 12 | 13   | 14                       | 15                            | 16 | 17  | 18                           | 19              | 20 | 21 | 22 | 23 | 24 |
| 4   | Research 1                       | Growth and Development (2 cr)          | Cardiorespiratory system (6 cr) |   |  |  |   |   | Musculoskeletal system (4 cr)  |   |  |    | Gastrointestinal, Hepatobiliary and Pancreas system (4 cr) |                          |                               |    | Endocrine, Metabolic and Nutrition (4 cr) |                              |                 |    |    |    |    |    |
| 22 cr   | Research 1 (2 cr)                |  |                                 |   |  |  |   |   |                                |   |  |    |  |                          |                               |    |   |                              |                 |    |    |    |    |    |
|   | 5                                | Kidney and Urinary Tract system (4 cr) |                                 |   |  | Reproductive system (4 cr)   |   |   |                                | Hematology and Immunology System (4 cr) |  |    |  | Neuropsychiatrist (4 cr) |                               |    |   | Special Senses System (4 cr) |                 |    |    |    |    |    |
| 22 cr   | Medical Skills 3 (2 cr)          |  |                                 |   |  |  |   |   |                                |   |  |    |  |                          |                               |    |   |                              |                 |    |    |    |    |    |
|   |                                  |  |                                 |   |  |  |   |   |                                |   |  |    |  |                          |                               |    |   |                              |                 |    |    |    |    |    |
| Sub Program III   |                                  |  |                                 |   |  |  |   |   |                                |   |  |    |  |                          |                               |    |   |                              |                 |    |    |    |    |    |
| Semester  | 1                                | 2                                      | 3                               | 4 | 5  | 6  | 7   | 8 | 9                              | 10                                      | 11   | 12 | 13   | 14                       | 15                            | 16 | 17  | 18                           | 19              | 20 | 21 | 22 | 23 | 24 |
| 6   | GELS 2 (2 cr)                    | Internal Medicine (2 cr)               |                                 |   |  | Neuropsychiatric dan Rehabilitation (3 cr) (Neurology, Psychiatry, Physical Medicine and Rehabilitation) |   |   |                                | Health Care Management (2 cr)           |  |    |  | Religion 2 (2 cr)        |                               |    |   | KKN-BBM (3 cr)               |                 |    |    |    |    |    |
| 20 cr   |                                  | Pediatrics (2 cr)                      |                                 |   |  |  |   |   |                                | Public Health 2 (2 cr)                  |  |    |  | Medical Skills 4 (2 cr)  |                               |    |   |                              |                 |    |    |    |    |    |
|   | 7                                | Research 2                             | Obstetry & Gynecology (2 cr)    |   |  |  | Special senses (3 cr) (Ophthalmology, Ear, Nose, Throat-Head & Neck, Dermatology & Venereology) |   |                                |   | Supporting Clinical Studies (2 cr) (Radiology, Anesthesiology & Reanimation) |    |  |                          | Forensic & Medicolegal (2 cr) |    |   |                              | Elective (4 cr) |    |    |    |    |    |
| 23 cr   | Surgery (2 cr)                   |  |                                 |   |  |  |   |   |                                |   |  |    | Comprehensive Clinical Skills (2 cr)                       |                          |                               |    |   |                              |                 |    |    |    |    |    |
|   | Research 2 (6 cr)                |  |                                 |   |  |  |   |   |                                |   |  |    |  |                          |                               |    |   |                              |                 |    |    |    |    |    |

0 Appendix: Programme Learning Outcomes and Curricula

Professional stage

| Clinical posting 1                   | credits       | ELEKTIF 1                 | Clinical posting 2            | credits       | ELEKTIF 2                         | Comprehensive Medical Knowledge and Clinical Skills | credits |  |
|--------------------------------------|---------------|---------------------------|-------------------------------|---------------|-----------------------------------|---|---------|--|
| Internal Medicine                    | 7             | Medical Emergency         | Surgery                       | 6             | Disaster Management               |   | 5       |  |
| Pediatrics                           | 6             | Cardiac Emergency         | Obstery & Ginecology          | 6             | Social Obstetry & Family Planning |   |         |  |
| Neurology                            | 3             | Pediatric Emergency       | Ophthalmology                 | 2             | Obstetric Emergency               |   |         |  |
| Psychiatry                           | 3             | Paternity and Medicolegal | Ear, Nose, Throat-Head & Neck | 2             | Primary Trauma Care               |   |         |  |
| Pharmacology and Treatment           | 1             | Palliative Care           | Anesthesiology & Reanimation  | 2             | Family Doctor                     |   |         |  |
| Forensic & Medicolegal               | 2             | HIV - AIDS                | Public Health                 | 4             |                                   |   |         |  |
| Dermatology & Venerology             | 2             |                           | Community Medicine            | 2             |                                   |   |         |  |
| Radiology                            | 1             |                           |                               |               |                                   |   |         |  |
| Physical Medicine and Rehabilitation | 1             |                           |                               |               |                                   |   |         |  |
|                                      | 26<br>credits | 1 credits                 |                               | 24<br>credits | 1 credits                         |   |         |  |

According to the Self-Assessment Report, the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the Master's Programme Basic Medical Science:

“Graduate's Profile and Learning Outcomes of Master's Programme Basic Medical Science

Graduate's Profile of Master's Programme Basic Medical Science

Master Basic Medical Science Study Programme Faculty of Medicine Universitas Airlangga will produce graduates who have roles and characteristics as communicator, leader, teacher, researcher, dignified, superior, independent and innovative.

#### 1. Communicator

Magister Basic Medical Science Study Programme graduates are able to communicate well a health concept with health communities, students, and colleagues.

#### 2. Leader

Magister Basic Medical Science Study Programme graduates are able to become leaders in the field area of health communities.

#### 3. Teacher

Magister Basic Medical Science Study Programme graduates have the responsibility to assist education and trainings of future generations. Participating as a teacher not only conveys knowledge to others, but also offers opportunities for practitioners to gain new knowledge and perfect existing skills.

#### 4. Researcher

Researcher are namely individuals or teams who conduct research with the scientific method, in this case graduates Basic Medical Science Study Programme, to carry out research for self-development and science in health area.

#### 5. Dignified

Dignity means having dignity, which is to have a human degree and an honorable position, in this case the Basic Medical Sciences Study Programme graduates are someone who has

and maintains his honor as a human created by God who has reason, natural abilities, and basic rights and obligations.

#### 6. Superior

Superior means being prominent or good, in this case the Basic Medical Science Study Programme graduates has superior traits and behaviors in their own life and community.

#### 7. Independent

Independent means that in a state of not relying on others, in this case the Basic Medical Science Study Programme graduates are able to rely on themselves in all conditions, whether they have to work alone or when they have to work in a team.

#### 8. Innovative

Innovative means being able to introduce something new, in this case the Basic Medical Study Programme graduates are someone who has the idea and fight to find solutions to important scientific problems for the community by introducing new things.

#### Learning outcomes of Master's Programme Basic Medical Science

In order to produce graduates with the expected profiles, the developed learning outcomes are divided into 2 groups: specialist competencies and social competencies. The details are as follows:

##### A. Specialist competencies:

1. Able to design researches from the basis and scientific concept, purpose, methodology, and to conclude the results according to the concentration, which consists of (optional) Anatomy-Histology, Biochemistry, Physiology, Pharmacology, Medical Laboratory, Microbiology, Parasitology, Pathobiology, and Medical Hyperbaric.
2. Able to form and finish a scientific research thesis in a correlated educational concentration that produces outcome in a form of publication, either nationally or internationally.
3. Able to document, to keep safe, and to retrieve data results of researches in order to ensure the validity and to avoid plagiarism.

4. Able to understand the steps of decision making in the context of educational and technological development problem solving that pays attention to humanity aspect also applies it based on analysis review or experimental, towards information and data.

5. Having specified competency on each (optional) branches of study concentrations, and able to be a lecturer in medical or health education in area of their selected field, as follow:

a. Anatomy-Histology: Graduates are able to analyze the microscopic and macroscopic structure and morphology of mammals (humans) and able to understand and integrate them in the field of medical science; able to carry out and understand the techniques or procedures to perform histological preparations, immunohistochemistry, cytogenetics, anatomy of cadaver dissection and anthropometry, capable of developing and managing a laboratory of anatomy and histology; Able to analyze and use concepts in the fields of Embryology and Cytogenetics, Physical Anthropology, Neuroanatomy and Neuroscience, Clinical Anatomy and Kinesiology in applied clinics.

b. Biochemistry: Graduates are able to analyze aspects of genetic manipulation techniques in viruses / phages, bacteria, yeast and human genomes to support the diagnosis, pathogenesis and clinical benefits of some human genetic disorders; capable of analyzing biochemical / molecular biology aspects in various diseases or clinical disorders, which may include diagnostic processes, pathogenesis, prognosis and therapy for various diseases or clinical disorders.

c. Physiology: Graduates are able to analyze the mechanism of changes in cellular functions and structures at the molecular level and their systemic effects, and the role of biomolecules in the maintenance of cellular life; able to analyze various concepts and mechanisms of the body systems such as the nervous system, the endocrine system, the digestive system, the metabolism, the respiratory system, the cardiovascular system, the body, the kidneys and the blood under normal conditions and in certain conditions pathological able to implement and integrate various concepts and mechanisms of the function and structure of cells or tissues or organs in certain physiological or pathological conditions to prevent or inhibit the progression of the disease, both at the molecular and systemic level.

d. Pharmacology: Graduates are able to analyze the influence of various genetic / genomic aspects on the pharmacokinetics and pharmacodynamics of several medications; able to analyze various pharmacological aspects of various drugs / compounds in the cardiovascular system in the form Basic science studies or clinical aspects; able to analyze various concepts about drugs / chemical compounds that work in the autonomic nervous system and

connect them with numerous organ systems in various circumstances. Medical Laboratory: Graduates are able to analyze and use the concept of metabolism in normal humans, the control process, and several events that underlie metabolic disorders / diseases that occur in humans and biological oxidation in cells; able to carry out applied serological examinations on various infectious diseases in order to support research in the field of serology; able to use medical laboratory equipments.

e. Microbiology: Graduates are able to analyze the development of the body's ability to cope with infectious and non-infectious diseases; able to apply aspects of instrumentation and maintain the laboratory quality of microbiology and serology of infection to support the diagnosis, pathogenesis, prognosis and treatment of various diseases or clinical disorders; able to analyze the role of bacteria, viruses and fungi in the world of general health, and in particular infectious diseases, and analyze and conclude the pathogenesis of infectious diseases and disseminated in the community; able to analyze and comprehend the scientific concepts of infectious diseases and their management.

f. Parasitology: Graduates are able to analyze the problems of parasitic worms and other parasites as the causes of zoonoses in the medical field; able to analyze problems about disease-causing protozoa in humans; able to analyze problems and mechanisms of protozoa as the causes of infections in humans; able to analyze the mechanism of the body immune response to parasite infections.

g. Pathobiology: Graduates are able to analyze various changes in immunological processes to maintain homeostasis in humans; able to analyze the pathobiology problem of cancer and be able to use various concepts of neoplasia in pathobiological research; skills in (1) beneficiaries of the Pathobiology paradigm to conduct research in improving the pathogenesis of existing diseases and carcinogenesis, (2) finding biological markers as indicators of diagnosis, disease severity and disease healing process, (3) molecular changes of underlying pathogenesis, repair reactions, and healing of diseases, (4) growth of stem cells in the concept of niche stem cells.

h. Laboratory Instrumentation: Graduates are able to analyze and use the concept of metabolism in normal humans, the control process, and several events that underlie metabolic disorders / diseases that occur in humans and biological oxidation in cells; able to carry out applied serological examinations on various infectious diseases in order to support research in the field of serology; able to use medical laboratory equipments.

B. Social competencies:

6. Able to develop logical, critical, systematic, and creative thinking through scientific research, the creation of designs or works of art in the field Basic medical and Biomedical science and technology that pay attention to and apply the values of humanities in accordance with their fields of expertise, and are able to compile scientific conception and results study based on rules, procedures, and scientific ethics.

7. Able to gather scientific ideas, thoughts, and arguments responsibly and based on academic ethics, and communicate them through the media to both scientific and public communities.

8. Able to analyze and comprehend the concepts of the healthy and the sick, etiology, pathogenesis, pathobiological changes, cellular level changes, reactions to lesions, genetic aspects, pharmacokinetics / pharmacodynamics of drugs, pathophysiology and mechanism of work of organs in accordance with the branches of study Histology or Biochemistry or Physiology or Pharmacology or Laboratory Medicine or Microbiology or Parasitology or Pathobiology, in the field Basic Medical Sciences / biomedicine.



The following **curriculum** is presented:

|                      |               |  |  |   |   |  |   |   |   |                                       |
|----------------------|---------------|--|--|---|---|--|---|---|---|---------------------------------------|
| <b>ACADEMIC YEAR</b> | <b>Year-2</b> | Sem-4  | <b>PNK699 Research activities &amp; Thesis Writing &amp; Publication</b> |   |   |  |   |   |   |                                       |
|                      |               | Sem-3  | <b>PNK698 Thesis Proposal &amp; Research activities</b>                  |   |   |  |   |   |   |                                       |
|                      | <b>Year-1</b> | Sem-2 (17 cr)  | <b>BIA602 (3)</b><br>Human Anatomy and Cadaver Dissection                | <b>BIR601 (2)</b><br>Embryology and Cytogenic                     | <b>BIA604 (2)</b><br>Neuroanatomy                             | <b>BIS607 (2)</b><br>Cell Ultrastructure and Histology of Main Tissues | <b>BIH601 (2)</b><br>Histology of Organs dan Main Tissues | <b>BIA606 (2)</b><br>Clinical Anatomy & Kinesiology | <b>Elective Module (2)</b>  | <b>Elective Module (2)</b>            |
|                      |               | Sem-1 (16 cr)  | <b>PNK697 (2)</b><br>Research Methodology                                | <b>MAS603(2)</b><br>Biostatistics                                 | <b>BIS609(2)</b><br>Philosophy and Research Bioethics         | <b>BII604(2)</b> Cell Biomolecule and Biology                          | <b>FIA602(2)</b><br>Immunology                            | <b>KDK612(2)</b><br>Medical Pathology               | <b>FIA602(2)</b><br>Instrumentation and Enhancement of Laboratorium Quality | <b>BIS604(2)</b><br>Molecular Biology |
| Physiology           | Sem-2         | <b>BIS603 (3)</b><br>Physiology of Digestive System and Metabolism | <b>BIF606 (2)</b><br>Physiology of Respiration                           | <b>BIF608 (3)</b><br>Physiology of Kidney, Blood, and Body Fluids | <b>BIF601 (3)</b><br>Physiology of Endocrine dan Reproduction | <b>BIS604 (2)</b><br>Physiology of Excitable Cells                     | <b>Elective Module (2)</b>                                | <b>Elective Module (2)</b>                          |   |                                       |
| Biochemistry         | Sem-2         | <b>BIA601 (3)</b><br>Metabolism I                                  | <b>BIK611 (2)</b><br>Enzymology  | <b>BIR601 (2)</b><br>Endocrine                                    | <b>BIK608 (2)</b><br>Clinical Biochemistry                    | <b>BIG609 (2)</b><br>Genetic Engineering                               | <b>KSK601 (2)</b><br>Molecular Biology Capitas-Selecta    | <b>Elective Module (2)</b>                          | <b>Elective Module (2)</b>  |                                       |

0 Appendix: Programme Learning Outcomes and Curricula

|                             |       |  |  |  |   |   |  |                     |                     |
|-----------------------------|-------|--|--|--|---|---|--|---------------------|---------------------|
| Pharmacology                | Sem-2 | FAK602 (2)<br>General Pharmacology (Pharmacokinetics and Pharmacodynamics) | FAK604 (2)<br>Experimental Pharmacology          | FAT607 (2)<br>Pharmacogenomic  | BII605 (2)<br>Immuno pharmacology                 | FAT610 (2)<br>Pharmacology of CNS               | FAT609 (2)<br>Pharmacology of Cardiovascular System            | Elective Module (2) | Elective Module (2) |
| Pathobiology                | Sem-2 | BIS611 (3)<br>Cell Inflammation, Healing, and Recovery                     | BIS608 (2)<br>Cell Injury, Adaptation, and Death | BIF605 (2)<br>Hemodynamic Balance and Pathology of Circulation-Shock     | KDC601 (2)<br>Neoplasia and Tumor Immunity        | BIG605 (2)<br>Genetic Abnormalities             | KDP601 (2)<br>Immune Diseases and Infancy-Childhood Disorders  | Elective Module (2) | Elective Module (2) |
| Medical Microbiology        | Sem-2 | KDM605 (2)<br>Basics of Microbiology                                       | KDM601 (3)<br>Medical Bacteriology I             | KDM603 (2)<br>Medical Virology I   | KDM607 (2)<br>Medical Mycology                    | KDM618 (2)<br>Zoonoses                          | KSK602 (2)<br>Modern Capitas-Selecta                           | Elective Module (2) | Elective Module (2) |
| Medical Parasitology        | Sem-2 | KDM608 (3)<br>Helminthology and Parasitic Zoonoses                         | KDM610 (2)<br>Protozoology I                     | KDM606 (2)<br>Entomology   | BIS610 (2)<br>Immuno parasitology                 | FIA601 (2)<br>Laboratorium Technology           | KDM611 (2)<br>Protozoology II                                  | Elective Module(2)  | Elective Module (2) |
| Skills Medical Laboratorium | Sem-2 | BIK601 (3)<br>Metabolism I   | BIK6011 (2)<br>Enzymology                        | MAS608 (2)<br>Statistics and Enhancement of Medical Laboratorium Quality | FIA603 (2)<br>Instruments of Medical Laboratorium | KDK608 (2)<br>Applicable Serologic Examinations | KDK607 (2)<br>Laboratorium Examinations of Endocrine Disorders | Elective Module (2) | Elective Module (2) |

0 Appendix: Programme Learning Outcomes and Curricula

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The elective module for Master Program of Basic Medical Science

| Semester             | Code   | Elective Module                          | Credits   |
|----------------------|--------|--|-----------|
| (1)                  | (2)    | (3)                                      | (4)       |
| II                   | BIH602 | Histotechnique & Photomicroscopy         | 2         |
| II                   | SOA602 | Body Anthropology                        | 2         |
| II                   | BIF602 | Physiology of Cardiovascular             | 2         |
| II                   | BIF607 | Physiology of Cardiovascular             | 2         |
| II                   | BIK604 | Metabolism II                            | 2         |
| II                   | FIA601 | Laboratorium Technology                  | 2         |
| II                   | FAT611 | Pharmacology of Autonomic Nervous System | 2         |
| II                   | FAT608 | Pharmacology of Endocrine System         | 2         |
| II                   | KDM609 | Infectious Diseases                      | 2         |
| II                   | KDK605 | Pathology of Environment and Nutrition   | 2         |
| II                   | KDM602 | Medical Bacteriology II                  | 2         |
| II                   | KDM604 | Medical Virology II                      | 2         |
| II                   | KDK602 | Helminthology II                         | 2         |
| II                   | KDM607 | Entomology II                            | 2         |
| II                   | KDK601 | Basics of Serologic Examinations         | 2         |
| II                   | KDK606 | Routine Hematologic Examinations         | 2         |
| <b>Total credits</b> |        |  | <b>33</b> |

According to the Self-Assessment Report, the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the Master's Programme Basic Medical Science:

“Graduate's Profile and Learning Outcomes of Master's Programme Tropical Medicine

Graduate's Profile of Master Programme Tropical Medicine

Conforming to the Indonesian Qualification Framework/ Kerangka Kualifikasi Nasional Indonesia (KKNI) number 8/year 2012, Master's program graduates are required to have the following profiles :

1. Care provider

Graduates can overcome problems Tropical diseases in a community in a comprehensive/holistic manner.

2. Decision maker

Graduates can determine a strategy to control tropical diseases in a community in an evidence-based, innovative, ethical manner.

3. Communicator

Graduates can communicate with other experts from various scientific fields in a comprehensive and ethical manner to control tropical disease in a community.

4. Community leader

Graduates can overcome tropical disease by leading a community.

5. Manager

Graduates can run a managerial in a professional society as well as in a general public to overcome tropical disease.

6. Researcher

Graduates can conduct and produce useful research in tropical disease to reduce the incidence Tropical disease in a community.

Learning outcomes of Master's Programme Tropical Medicine

In order to produce graduates with the expected profiles, the developed learning outcomes are divided into 2 groups: specialist competencies and social competencies. The details are as follows:

A. Specialist Competencies

1. Able to overcome the problem Tropical diseases in a community in a comprehensive/holistic manner (care provider)
2. Able to determine the strategy to control tropical diseases in a community in an evidence-based, innovative, ethical manner (decision maker)
3. Able to communicate with other experts from various scientific fields in a comprehensive and ethical manner to control tropical disease in a community (communicator)
4. Able to overcome tropical disease by leading a community (community leader)
5. Able to run a managerial in a professional society as well as in a general society to overcome tropical disease (manager)
6. Able to conduct and produce a useful research in tropical disease to reduce the incidence Tropical disease in a community (researcher).

B. Social Competencies

7. Able to retrieve and exchange scientific knowledge in depth through verbal and non-verbal communication with the community, colleagues, and other professionals (noble learner)
8. Able to perform professional tropical medicine research in accordance to bioethics, discipline, laws, and socio-cultural (noble professionalism)
9. Able to perform logical, critical and systematic thinking to conduct and to evaluate bio-research (noble scientist)”

The following **curriculum** is presented:

Major Interest of Clinical Tropical Medicine

|                      |  |                           |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------|--|---------------------------|---|---|---|---|--|---|--|--|--|--|--|--|--|--|--|--|--|-------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| <b>ACADEMIC YEAR</b> | <b>Year 2</b>  | Semester IV<br>10 credits | Pre-Thesis Exam Seminar<br>(3 credits)          | Thesis Exam<br>(7 credits)                                    |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                      |  | Semester III<br>6 credits | Perinatology in Tropical Disease<br>(2 credits) | Management and Control of Nosocomial Infection<br>(2 credits) | Micro-nutrients in Tropical Medicine<br>(2 credits) |   |  |   |  |  |  |  |  |  |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                      | <b>Year 1</b>  | Semester II<br>13 credits | Epidemiological Surveillance<br>(3 credits)     | Parasitology in Tropical Medicine<br>(2 credits)              | Immunology in Tropical Medicine<br>(2 credits)      | Clinical Tropical Medicine<br>(2 credits) | Pediatric Tropical Medicine, Promotion and Prevention<br>(2 credits) | Elective Course<br>(2 credits)                                |  |  |  |  |  |  |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                      |  | Semester I<br>15 credits  | Methodology of Research<br>(2 credits)          | Biostatistics<br>(2 credits)                                  | Phylosophy of Science and Bioethics<br>(2 credits)  | Epidemiology<br>(2 credits)               | Molecular and Cellular Biology in Tropical Medicine<br>(2 credits)   | Bacteriology and Mycology in Tropical Medicine<br>(3 credits) | Virology in Tropical Medicine<br>(2 credits) |  |  |  |  |  |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                      |  |                           |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                      | <table border="1"> <tr> <td colspan="2"><b>Note</b></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="background-color: #e0ffff;"></td> <td>Main competencies</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="background-color: #ffff00;"></td> <td>Supporting competencies</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="background-color: #90ee90;"></td> <td>Elective competency</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> |                           |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  | <b>Note</b> |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Main competencies |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Supporting competencies |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Elective competency |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Note</b>          |  |                           |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                      | Main competencies  |                           |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                      | Supporting competencies  |                           |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                      | Elective competency  |                           |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Major Interest of Epidemiological Tropical Medicine

|                      |               |                           |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |
|----------------------|---------------|---------------------------|---|---|---|---|---|---|---|--|--|--|--|--|--|--|--|--|--|
| <b>ACADEMIC YEAR</b> | <b>Year 2</b> | Semester IV<br>10 credits | Pre-Thesis Exam Seminar<br>(3 credits)  | Thesis Exam<br>(7 credits)                              |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |
|                      |               | Semester III<br>6 credits | Screening of Health Problems and Evaluation of Health Programs<br>(2 credits) | Outbreak Investigation and Surveillance<br>(2 credits)  | Analytical Epidemiology Research<br>(2 credits)               |   |   |   |   |  |  |  |  |  |  |  |  |  |  |
|                      | <b>Year 1</b> | Semester II<br>13 credits | Epidemiological Surveillance<br>(3 credits)                                   | Environmental Health in Tropical Disease<br>(2 credits) | Communication and Advocacy in Tropical Disease<br>(2 credits) | Epidemiology of Tropical Disease and Data Management<br>(2 credits) | Management of Control Programs of Tropical Disease<br>(2 credits) | Elective Course<br>(2 credits)                                |   |  |  |  |  |  |  |  |  |  |  |
|                      |               | Semester I<br>15 credits  | Methodology of Research<br>(2 credits)  | Biostatistics<br>(2 credits)                            | Phylosophy of Science and Bioethics<br>(2 credits)            | Epidemiology<br>(2 credits)   | Bacterial and Fungal Infection in Tropical Disease<br>(3 credits) | Viral Infection & Zoonosis in Tropical Disease<br>(2 credits) | Parasitic Infection & Zoonosis in Tropical Disease<br>(2 credits) |  |  |  |  |  |  |  |  |  |  |
|                      |               |                           |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |

**Note**  
 Main competencies  
 Supporting competencies  
 Elective competency