

PROGRAMME REVIEW

**Master of Science in Public Health - Master of Science
in Global One Health: diseases at the human-animal
interface - Master of Science in Tropical Medicine**

Institute of Tropical Medicine

Brussels - May 2024

PROGRAMME REVIEW INSTITUTE OF TROPICAL MEDICINE

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Preface VLUHR Quality Assurance Board

Dear reader,

This assessment report deals with the programme review of the Master of Science in Public Health (MPH), the Master of Science in Global One Health: diseases at the human-animal interface (MGOH) and the Master of Science in Tropical Medicine with orientations 'Clinical Sciences' and 'Biomedical Sciences' (MTM) at the Institute of Tropical Medicine (ITM). This programme review was conducted by an independent panel of experts between October 2022 and May 2024.

This report is intended for all stakeholders of the programmes and provides a snapshot of its quality following the review principles for quality assurance for programme assessments in Flanders. As president of the VLUHR Quality Assurance Board, I hope that the panel's findings, judgements, recommendations, and commendations will advance these programmes. Additionally, this report intends to provide information regarding the quality of the programmes to a wider audience. For this reason, this report is published on the website of VLUHR QA.

I would like to thank all members of the panel for the time they invested and the dedication they showed carrying out this programme review. At the very same time, this review was only possible because of the commitment of all those involved at the programmes. I hope this report does justice to their efforts.

Mia Sas
President VLUHR Quality Assurance Board

Programme review

Introduction

This assessment report presents the findings, judgements, commendations and recommendations regarding the Master of Science in Public Health (MPH), the Master of Science in Global One Health: diseases at the human-animal interface (MGOH) and the Master of Science in Tropical Medicine with orientations 'Clinical Sciences' and 'Biomedical Sciences' (MTM) at the Institute of Tropical Medicine (ITM).¹

This programme review was carried out in accordance with the [Manual for Programme Review](#). Patrick Van den Bosch, Head of VLUHR QA, was project manager of this programme review.

Panel composition

The proposal of candidate panel members was approved by the VLUHR Quality Assurance Board on 8 March 2023. The composition of the ITM panel was ratified by the VLUHR Quality Assurance Board on 6 June 2023 and 27 November 2023. The panel has the following composition²:

- **Kabir Sheikh**, Professor of Global Health Systems and Policy, Global Business School for Health, University College London, United Kingdom (chairperson)
- **Proochista Ariana**, Director, Master in international Health and Tropical Medicine, Oxford University, United Kingdom
- **Olaf Horstick**, Professor at the Heidelberg Institute of Global Health, Heidelberg University, Germany
- **Jakob Zinsstag**, Professor of epidemiology (Titularprofessur), Swiss TPH/University of Basel, Switzerland
- **Serhat Yildirim**, Graduate student MSc Global Health Delivery, Harvard Medical School, USA

Review principles

The programme review was conducted in accordance with the eight quality features. These features are the characteristics of a high-quality higher education programme, defined by NVAO and tied in with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG, 2015). For each programme whose quality is satisfactory, the presence of the following quality features is guaranteed:

1. The programme's learning outcomes constitute a transparent and programme-specific interpretation of the international requirements regarding level, content, and orientation;
2. The programme's curriculum ties in with the most recent developments in the discipline, takes account of the developments in the professional field, and is relevant to society;
3. The staff allocated to the programme provide the students with optimum opportunities for achieving the learning outcomes;
4. The programme offers the students adequate and easily accessible services, facilities, and counselling;
5. The teaching and learning environment encourages the students to play an active role in the learning process and fosters smooth study progress;
6. The assessment of students reflects the learning process and concretises the intended learning outcomes;
7. The programme provides comprehensive and readable information on all stages of study;
8. Information regarding the quality of the programme is publicly accessible.

¹ For the administrative details of the institution and the programme(s) involved, see Annex 1.

² A short cv of the panel members is included as Annex 2.

In addition, a programme ensures the involvement of internal and external stakeholders on the one hand and external and independent peers and experts on the other hand, in a continuous pursuit of quality development. If applicable, the programme must also comply with relevant regulations with respect to the admission of graduates to corresponding posts or professions.

Preparation

In preparation of the programme review, the programmes compiled a self-evaluation report in accordance with the VLUHR QA Manual for Programme Review. The panel received the self-evaluation report (including supporting materials) several weeks before the visit of the programmes. The panel thoroughly studied the self-evaluation report and its annexes to prepare for the visit.

Prior to the visit, the panel members attended a training session (15 January 2024). During the training, the panel members received more detailed information on the review and the practical details of how the review process takes place. Special attention was given to the status of the programmes, quality assurance in Flanders and Europe and interview techniques. The panel got acquainted with the review principles and was informed about how this framework relates to the European Standards and Guidelines (ESG). The visit schedule was also discussed and is attached in Annex 3. Finally, the self-evaluation report was discussed in depth to prepare the site visit.

Visit

The panel carried out the site visit on 4-6 March 2024 at ITM in Antwerp. During this site visit, the panel conducted interviews with all those involved in the programmes in order to gain insight into the quality of the programmes, including management, students, teaching and supporting staff, alumni, and employers. Part of the site visit was dedicated to review the programme-specific infrastructure. In order to give all stakeholders the opportunity to talk confidentially to the panel, there was an open consultation. At the end of the site visit, the panel discussed its findings, judgements, recommendation and commendations with the programme management in a co-creative session. After a final panel meeting, the panel shared its main conclusions with the programme management in an oral report. The interviews took place in an open and constructive atmosphere and provided the panel, in addition to the documents studied (see Annex 4 for an overview), relevant insights regarding the quality of the programmes.

Report

In the subsequent assessment report the panel provides the findings, judgements, recommendations, and commendations regarding the quality of the programmes as a whole. The panel also formulates a conclusion at the end of the report, readable for a broad audience and including an advice for accreditation, as well as a list of commendations and recommendations. The programme management was given the opportunity to respond to the draft of this report before finalisation.

Programme report

This report covers the evaluation of the three master programmes at the Institute of Tropical Medicine (ITM):

- the Master of Science in Public Health (MPH)
- the Master of Science in Global One Health: diseases at the human-animal interface (MGOH)
- the Master of Science in Tropical Medicine with orientations 'Clinical Sciences' and 'Biomedical Sciences' (MTM)

Management of the programmes

The academic management of education at ITM is carried out in three departments: Public Health, Clinical Sciences and Biomedical Sciences. Depending on the nature of the master programme the staff of each department is involved in the programme. Every department has a Departmental Education Coordinator who manages the educational policy at the departmental level and coordinates an education unit. The coordinator is part of a larger coordination team that takes care of the daily management and coordination of the master programmes. The coordination team consist of co-coordinators, course secretariats and/or course directors.

The departmental education unit consists of an education course secretariat that is responsible for the administrative support of education, and teaching and learning support to provide the necessary pedagogical and technology enhanced learning support within the departments.

While the management and coordination of the educational activities within the department fall under the responsibility of the departmental education coordinators, it is the Programme Director(s) who are academically responsible for a master programme. The Programme Director is being selected from the pool of members of the senior academic and scientific staff and appointed for renewable terms of two years by the Management Committee. The Programme Director is assisted by a steering group consisting of the course leaders and the education coordinator(s).

For the MGOH programme, that is organised between two institutions, ITM and University of Pretoria (UP) (see below), a Memorandum of Understanding was drawn up to set out the framework for a collaborative degree. Representatives from both institutions are appointed to coordinate and manage the jointly organised programme in the "Joint Management Committee" (JMC). The JMC handles all administrative, legal, educational and financial matters of the programme.

Finally, every master programme has an examination board that decides on the final result for each student during a deliberation meeting (see infra). The examination board is composed of the members of the exam jury of all students. Additional members, including the ombudsperson and the course coordinator(s) can be invited in an advisory capacity.

The panel believes that ITM and its three master programmes have a clear and workable structure within ITM. This structure allows for the appointment of the appropriate experts within the departments to provide education in the three master programmes. Since the MGOH is a collaboration between two institutions, authority was shared through the JMC. However, as the programme is not yet an official joint degree, ITM retains full responsibility for delivering a quality education to every student enrolled at ITM. The current structure ensures that ITM assumes this final responsibility from the outset of the collaboration, including the design and approval of the programmes.

Quality Assurance

In preparation for the site visit, ITM, along with the three involved programmes, prepared a self-evaluation report (SAR). This SAR contains general information on aspects that are common to the three programmes. Additionally, the SAR includes detailed information on each master programme, with the aim of providing an overview of how they meet the quality criteria outlined in the assessment framework.

The panel carefully scrutinised the SAR and appreciated its thoroughness and completeness. The facts presented in the SAR were extensively documented by supporting documents, including relevant data and policy documents. Furthermore, the panel praised the SAR for its self-critical approach. The three programmes succeeded in providing a comprehensive view of their strengths and areas for improvement. The programmes are open to give the panel insights into the results of the surveys they undertook, and describe also openly and explicitly weaknesses that they detect, based on their internal quality assurance (QA) procedures. The self-critical reflections presented by the programmes in the SAR are always based on findings derived from quality assurance tools that the programme, centrally coordinated by ITM, use.

The panel learned during the interviews about some action points for improvement that are mentioned in the SAR and that the programmes are already addressing. While the panel acknowledges in this report these actions, they are not reiterated in the list of recommendations.

The three programmes involve all stakeholders in both internal and external QA processes. The panel noticed that QA in these programmes is not only the task of the educational support staff, but also students, alumni and teaching staff are involved. Students of all programmes testified to the panel that they were asked to assess the quality of each course. Students and alumni also testify that they noticed that the programmes take up students' suggestions for improvement. The panel noted that the quality assurance for all three programmes is demonstrated through various means including annual student questionnaires assessing course satisfaction and content quality, as well as ad hoc focus group discussions to dig deeper into student feedback. Additionally, biannual participation meetings between ITM management and elected student and alumni representatives facilitate open dialogue on educational matters.

Recognising the need for greater harmonisation of its quality assurance procedures, ITM sought to standardise survey instruments across its programmes in 2019, leading to the development of three concise questionnaires in 2020 for evaluating course components, thesis support, and overall programme quality. ITM revised its evaluation instruments again, introducing five questionnaires from the academic year 2023-2024 onwards to assess student expectations, course components, programme quality, post-graduation impact, and alumni career trajectories. This openness aiming also to optimise the tools used to measure the quality of the three programmes, shows a high degree of maturity of QA processes of the three master programmes, according to the panel.

The panel recognises ITM's awareness of the need for improvement in systematically escalating feedback from evaluations to the Policy Committee and ITM's management level. This challenge is partly attributed to the various bodies addressing educational matters at ITM: while they enhance engagement, delineating clear roles between these bodies is not always straightforward in practice. The panel supports ITM in its efforts to strengthen these processes further.

ITM has an alumni network that strives to bring together students, alumni and staff members living and working around the world. The ITM alumni community is a diverse network composed of more than 11.000 former students with around 5000 national and international alumni currently registered in the alumni database. The alumni network aims to facilitate scientific knowledge and information sharing and networking, strengthen career development of students and alumni, generate interdisciplinary and cross-regional collaboration, develop mentorship opportunities, as well as enable lifelong relationships with ITM.

For this purpose, ITM launched ITM Alumni Connect - an online alumni platform - to offer the possibility for exchange, connectedness, and knowledge transfer. The panel suggests that the three ITM master programmes seek how the alumni network could structurally contribute to the programmes' QA.

For the MGOH programme, internal QA mechanisms can differ among partners ITM and UP. Therefore, the panel was glad to learn that the MGOH programme formalised an agreement on procedures used for QA in the Memorandum of Understanding between UP and ITM. Two main instruments used for internal QA are (1) student evaluations, and (2) regular joint meetings between administrative staff and lecturers.

Each of these programmes had already been evaluated and or initially accredited in the past. The panel could note with satisfaction that the three master programmes have been working based on the recommendations of the previous panels.

One of the hot topics in higher education is the use of artificial intelligence (AI). Teaching staff are together with the students discovering how to work with AI. The staff gives students freedom, guidance and responsibility, which is appreciable. There is a guideline on responsible use of the AI. Students are made aware of the pitfalls of using AI. The panel commends the proactive approach on guidelines for the use of AI.

IT support is integrated into the strategy and delivery of participatory learning and is responsive to student needs. This again suggests a strong degree of teamwork and integration across academic and support functions, which is appreciated (see infra).

Mission and vision of the programmes

MPH

The Master of Science in Public Health (MPH) is a 60 ECTS international programme aiming at enhancing students' capacity to address the challenges related to Universal Health Coverage, responsive health care, local health systems, disease control programmes and health policies. These challenges include the concurrent epidemiological and demographic transitions, emerging infectious diseases and persisting health inequities, but also sustainable control and elimination of infectious diseases, sexual and reproductive health needs (including young people), global warming and urbanisation.

MGOH

The Master of Science in Global One Health: diseases at the human-animal Interface (MGOH), formerly known as the Master of Science in Tropical Animal Health, is a 60-credit joint programme between the ITM and the Department of Tropical Veterinary Diseases (DVTD) of the University of Pretoria (UP). This programme combines online modules, on-campus skills training, field and bench work. It focuses on health at the interface of humans, animals and the ecosystem and provides practical One Health approaches to address multifaceted regional and global challenges.

The initial aim was to offer a joint degree programme but due to legal constraints in South Africa at the time, it was decided to call it a "collaborative degree". This implies that instead of awarding one shared degree i.e., a joint degree, each partner issues their own degree for the jointly developed curriculum with students receiving either an ITM or UP degree.

MTM

The Master of Science in Tropical Medicine (MTM) is a 60 ECTS programme. It aims to develop research skills on diagnosis and management of the most prevalent and re-emerging tropical diseases; it aims to strengthen training on research techniques and methods in the clinical and biomedical fields, and to contribute to the development of research capacities. MTM wants to put relevant clinical and biomedical research in a broader public health perspective.

The MTM offers two orientations: (i) clinical and (ii) biomedical sciences. After a common track "core course" in International health, students follow methodological and/or clinically oriented courses, or a "biomedical path" using biomedical techniques on a research topic, with hands-on experience in the laboratory.

Learning outcomes

During the site visit, the panel talked with stakeholders from the three programmes about the learning outcomes of the programmes. Through these interviews, the panel learned that the learning outcomes are well understood by both students and teaching staff. For each of the programmes, the Programme Learning Outcomes (PLOs) have also been clearly outlined on the ITM website.

According to the SAR, the learning outcomes are actively used by the programmes in their curriculum design. The panel observed that the programmes' PLOs are similar or a specification of the already validated domain-specific learning outcomes (DLO). This allows the programmes to ensure that their learning outcomes meet international requirements regarding level (QF 7), content, and orientation.

MPH

The PLOs specific to the programme cover all the DLOs. For some outcomes, the programme introduced minor differences in wording.

MGOH

The MGOH has PLOs that cover the DSLOs as well, according to the panel. The PLOs have been concretised to focus on acquiring the skills, knowledge and attitudes to control zoonotic diseases, and the application of the One Health approach, acknowledging that human, animal and environmental health are linked.

MTM

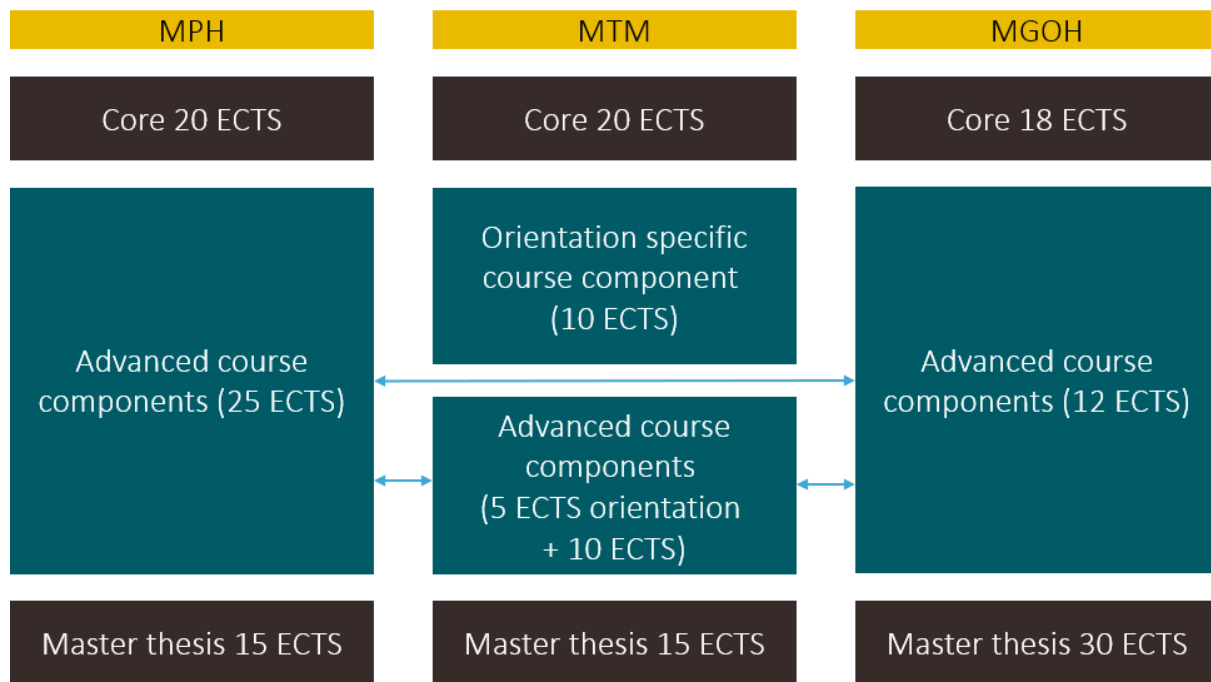
The programme-specific learning outcomes of the MTM are identical to the DLOs. However, the MTM builds on top of those learning outcomes through the learning outcomes of the two specific orientations.

The MTM programme informed the panel prior to the visit that with regard to the two orientations, they are inadvertently creating an artificial separation that hinders the spirit of interdisciplinary collaboration between biomedical and clinical profiles. Despite the original goal of promoting integration within the programme, the presence of orientations poses a challenge to this integration. Students expressed to the programme management a desire for more collaboration by organising joint activities more often. Moreover, the programme management informed the panel that according to their current experience, a biomedical profile does not necessarily predict a preference for a laboratory-based thesis project. However, the Flemish Codex of Higher Education states that there should be sufficient distinction of at least 30 ECTS between orientations, so the required level of distinction limits flexibility for the intended audience. The panel noted in its interviews that students have also asked for more flexibility in the choice of preparatory modules for personal study plans, considering their own needs. The programme advocates merging the two orientations.

The programme argues in the SAR that merging the two orientations would offer notable advantages, including the possibility for students of developing a broad skill set that spans clinical and biomedical aspects, delivering professionals with multi-disciplinary knowledge, who are well-prepared for their specific career goals. The flexibility would allow students to tailor their education based on individual interests, accommodating those whose career goals do not neatly align with strictly defined clinical or biomedical categories.

Merging orientations would further promote collaboration between clinical and biomedical professionals, mirroring real-world healthcare settings, and may lead to more efficient resource utilisation within the programme. Based on its discussions with the programme's stakeholders, the panel supports this intention to merge the two orientations and recommends that the programme management take the necessary steps of legal action.

Curriculum



MPH

The MPH is a 60 ECTS credits programme, that consists of three parts: the core course (20 ECTS), the advanced course components (25 ECTS) and MPH master thesis writing and defence (15 ECTS). The advanced course components should allow the students to acquire advanced methodological competencies and apply these methods to specific thematic domains. The advanced course components should even so allow the students to develop a learning path that responds to their needs and interests and allows for flexibility in time. Students can opt for a part-time track and spread out their studies over five years. The MPH thesis writing, and defence (15 ECTS) ensures that all students write a thesis and defend it at the end of the academic year in front of the international examination board.

In recent years, the programme has been updating its curriculum. The panel noted, based on the SAR and its interviews, that in doing so, the programme takes into account the defined PLOs. The panel learned from the SAR that the programme was a bit late in focusing on the relationship between climate change and health systems, programmes and policies. In the meantime, the programme has adapted to address contemporary public health challenges such as climate change, while still providing foundational skills for controlling pandemics, persistent communicable diseases, and the increasing burden of non-communicable diseases (NCDs). Recent adjustments in the programme reflect its relevance to both persistent and emerging global health challenges.

The panel noted that teaching staff is receptive to the pluralism of knowledge systems and integrated approaches like Eco-Health, also covering urbanisation and architectural themes. Students are trained in community involvement and crafting policy briefs. However, there is currently no formal teaching on transdisciplinary research approaches.

The 11-month duration of the programme is perceived as quite tight, yet alumni find the programme fit for purpose. They highly value the field experience, competence in health systems, and the blend of qualitative and quantitative mixed methods. Additionally, gaining a better understanding of health systems in high-income countries is seen as advantageous.

MGOH

The MGOH is a 60 ECTS blended programme, combining web-based and face-to-face learning activities. The programme consists of 4 building blocks: an introduction, core courses, elective courses and the master thesis (30 ECTS). These blocks are spread over two years to facilitate part-time study.

The panel learned that in the academic year 2022-2023, a comprehensive curriculum revision was conducted. This involved updating the content of the modules, not only in terms of learning materials but also by incorporating innovations in the presentation of materials, with a greater focus on interactive tools and (virtual) mobility. Students informed the panel that they appreciate the changes that have taken place.

Before the site visit, the panel raised the concern that the curriculum may not sufficiently address developments in the field of One Health but rather align more with veterinary sciences. Moreover, the thesis topics also appeared to be more on veterinary science rather than on interdisciplinary One Health topics. By delving deeper into course materials and based on the meetings during the site visit, the panel learned that course names do not fully cover the fact that One Health is much more present. Based on the history of the programme there was a strong focus on tropical animal health. In the co-creative meeting during the site visit, the programme acknowledged the need to bring in One Health more explicitly. However, alumni met by the panel testified that for them the curriculum is in practice already perceived as very much orientated towards One Health.

The programme establishes collaboration between animal health and public health and engages in integrated research. The panel thinks that One Health content can be complemented e.g., with methods on integrated environmental-animal-human study designs, cross-sector economic analyses, animal-human disease transmission models, integrated environment-animal-human surveillance-response systems, integrated antimicrobial resistance surveillance. This might lead to a more balanced One Health versus animal health course content. The panel recommends increasing the One Health aspect across all aspects of the curriculum, including module nomenclature, module content, assessments, and theses.

MTM

The programme structure consists of four clusters. Cluster 1 contains the core courses (20 ECTS). It serves as an introduction to the evolving field and focuses on health systems, health services organisation, and disease control. Cluster 2 focuses on: 'Tropical Medicine & Clinical Decision-Making courses' (10 ECTS) for medical doctors or 'Tropical Biomedical Sciences courses' (10 ECTS) for biomedical profiles. In cluster 3, students select thematic or methodological-oriented courses (15 ECTS) to deepen their knowledge in tropical clinical or biomedical sciences. Finally, students undertake cluster 4, which involves developing and presenting their master thesis (15 ECTS). This cluster includes thesis seminars, focusing on contextualising the research gap addressed in the thesis work, and the thesis manuscript and oral defence.

The panel understands, from discussions with stakeholders, that these all advocate a greater flexibility in the programme than the current split into two orientations. The panel believes that this adjustment requires the PLOs to be rewritten, but believes that this adjustment can be done perfectly well without adjustments to the DSLOs.

The panel scrutinised the curriculum. The panel learned that the courses are continuously adapted to changes and new evidence. The panel has the impression that the curriculum is trying to cover too many fields, from basic science to clinical sciences and public health. However, when talking to alumni and students, this is not aligned with their perception. The alumni testify that after graduating from the programme they feel well-prepared for work in the professional field both in the clinical and laboratory realm.

The panel invites the programme management to consider taking a step back and examining the broader goals and structure of this programme. This might include taking a problem and process-driven approach to designing course components as opposed to the current encyclopaedic approach to diseases, including emerging diseases. On a related note, the panel would also encourage greater consideration of integrated person-centred health care, public health, primary health care approaches, and the realities of multimorbidity, as potential foundational frameworks.

The panel recognises that the programme is under transition and that it is shaped through the legacy involvement of specific disciplines and specialities. However, the panel encourages prospective market research on future demand for specific clinical and laboratory-related skills in the context of a fully-fledged master programme - given a decline in the number of full-time enrolments.

Active learning

Based on the documents provided by the programmes and the discussions with all stakeholders, the panel states that learning is, in general, highly collaborative learning in the three master programmes. Many teachers remarked in their meetings with the panel that they are learning from experienced students, and students remarked that they learn as much from each other as from the teachers. Student-centred learning is therefore characteristic of the three programmes.

MPH

The MPH lecturers adopt methods that emphasise an active learning approach to learning. The teaching and learning methods consist of interactive lectures and various student-centred individual learning activities, such as exercises to apply concepts, computer practice for data analysis and information retrieval, and assignments focusing on presenting and writing skills. In addition, students are often put in small groups to prepare exercises and discussions on case studies or papers; these are followed by plenary presentations and discussion. For some topics, debates are organised. All course components include individual or group assignments with some degree of individual or collective coaching. Beyond scheduled contact hours, personal study time is systematically scheduled for preparatory work (engaging in reading, watching relevant videos, or participating in discussions/reflections), fulfilment of assignments or self-directed learning (to address gaps or explore further on chosen topics). There is currently only one course with fieldwork.

According to the panel, the MPH programme has a clear learning path and makes use of relevant technological support. Surveys conducted by the programme management and discussions with the panel indicate a perceived high workload. The panel suggests further investigating this perceived workload, emphasising the importance of providing adequate time for self-study in each course component.

The programme benefits from excellent teaching and learning support, ensuring active learning and an appropriate learning environment. There is creative thinking regarding content, delivery modalities, assignments, and group activities. The panel states that students benefit from peer-learning and the diversity of teaching approaches.

During discussions, some issues with group work were identified, including students who contributed either excessively or minimally. The panel appreciates that the programme management has already taken steps to address these issues.

MGOH

The MGOH is a programme that is mostly online. The panel investigated how both institutions set up the learning activities. The start of the programme is a 10-day induction workshop in South Africa. This workshop has two components: learning activities and a One Health field workshop. Following the induction workshop, students continue their studies online, starting with the core modules, which primarily consist of self-directed learning packages and discussion forums to facilitate interaction. Since the students are spread across the globe and studying part-time, organising synchronous teaching moments has proven to be challenging due to varying time zones, work commitments and sometimes unreliable internet connectivity or power outages, particularly for students in low and middle-income countries (LMICs). Consequently, an asynchronous teaching method was adopted as the primary approach.

The primary learning materials offered to students consist of peer-reviewed journal articles and lecture notes, accompanied by videos. While some innovative teaching methods, such as interactive videos, have been used to a limited extent and were appreciated by students, a preference was given by students for downloadable

documents and videos that can be used to study offline. As already mentioned, internet connections are not always stable in all countries, as the panel noticed themselves during the site visit.

The panel acknowledges that self-directed learning offers many benefits. Nevertheless, it is crucial for the programme to continue providing appropriate support and guidance to ensure students stay on track and meet the programme's learning objectives. Both alumni and current students clearly underlined that active learning is embedded into all learning processes. They call the setup of the programme a dedicated model that looks at the soft skills of students, which is particularly laudable.

MTM

The panel learned that MTM teaching consists of interactive lectures, small group sessions followed by plenary presentations and discussion, coached individual or group work, and presentations related to assignments. The panel finds that the teaching and learning methods used in MTM are diverse and well-designed to cater to various aspects of the learning process. The teaching and learning environment is therefore also characterised by a vision of interaction, exchange of experiences and critical reflection.

Admission and progression

Given that each of the programmes has a different target audience, the procedures and processes for admission to the programmes are slightly different. Nevertheless, for all three programmes, the information on admission is very clear on ITM's website, according to the students. On top of that the support given to them before entering the programme is seen as commendable by the panel (see below).

MPH

The MPH programme targets experienced health professionals and researchers with an academic degree in health sciences or other health-related domains. The panel received detailed admission criteria used by the selection committee, composed of the MPH coordination team and teaching staff. The committee rates and ranks the applications. For the full-time study track, the MPH aims for 36 students. The proportion of newly enrolled part-time students has increased since 2019.

The number of scholarships available for the MPH has gradually declined over the years due to the reallocation of scholarships to the new ITM master programmes and a budget reduction at the Belgian Directorate-General for Development. An alternative, proposed by the ITM management, might be to provide partial scholarships to subgroups of students, which may lead to selecting students based on their ability to pay. The panel supports this and the exploration of MPH to search for co-funding schemes for employers.

Over the past ten years, the proportion of female participants has ranged between 32% and 51%. There is a slowly increasing trend, partly explained by the increasing enrolment of students from high-income countries, most of whom are women. 83% of students are between 26 and 40 years old. The age distribution has remained relatively stable over the past ten years.

Both students and teaching staff in the programme acknowledge the current diversity of students as positive for knowledge and expertise sharing. The programme may benefit from an even more diverse student intake. The MPH attracts relatively few prospective students from Latin America and Asia, as well as from specific countries in Africa. The programme management is aware of this and intends to implement a tailored marketing strategy to attract students from these regions. The panel supports this approach.

The panel is satisfied to note that the programme achieves a high level of retention with very few dropouts. Over the last 8 years, 5 out of 324 students failed (1.5%). This is explained by the selection procedure, which identifies motivated candidates with high potential, a learning environment allowing for focus, and good peer and staff support.

MGOH

To apply for the programme, prospective students must go exclusively through ITM's student portal. This decision was made because ITM's application procedure is free of charge, while UP requests an administrative fee for applications. The panel is informed that starting from the intake of 2023, applicants are required to submit a concept note for their thesis. This adjustment aims to enhance the assessment of the feasibility of integrating work and study, considering factors such as available study hours and workload. Additionally, the concept note serves to align the thesis with realistic expectations in terms of time and budget, as well as to gain a deeper understanding of the applicants' overall career goals and how the MGOH can contribute to achieving these objectives. The panel supports this initiative of the programme. The panel suggests the programme to update its website to reflect the latest developments and showcase the benefits of the programme better.

The programme receives approximately 115 applications per year. The majority of applicants are African males, with an average age of 32. Females account for approximately 20% of all applications received. This is likely because most applications come from livestock veterinarians or related, which is a male-dominated profession. Every year between 20-25 students are admitted to the programme.

The panel was informed by students and alumni that some students may need additional time to complete their study programme. This is often due to students primarily combining their studies with an active career, which can sometimes lead to a weakening of focus on their education. The fact that most of the programme is conducted online also contributes to this phenomenon. The panel also learned from both students and teaching staff that when students become less active, teaching staff, and supporting staff actively reach out to them. The panel believes that this is an important aspect of student monitoring that should certainly be continued.

Over the past eight years, an average of 13% of students have not completed their study programme. Before COVID-19, the dropout rate was not as high. However, after COVID-19, there was an increase in dropout rates. The panel was informed that there are multiple reasons why students drop out, often related to personal or medical issues. The programme management addresses these issues on a case-by-case basis. It is possible that some students do not have a realistic understanding of the workload of the programme, leading to underestimation of the time required.

MTM

MTM targets clinical or biomedical professionals who wish to work in reference laboratories, research institutions, and in the sector of health actors involved in LMICs; and scientists who want to conduct basic, applied or operational research in academic institutes or reference laboratories.

The MTM selection is based on education profile, work background, motivation letter, provisional study plan, including a proposed master thesis topic. After a first screening for the academic selection, a shortlisted group of applicants is invited for an online interview. Based on the interviews a selection score is formulated according to career, motivation, possible thesis, chosen modules for study plan, English proficiency and funding availability.

The admission policy is based on academic selection and is intended to ensure equal opportunity of access to higher education for qualified students. The selection committee considers the group diversity (nationality, experience, background, gender) of the student cohort to maximise the potential of peer-learning and interdisciplinarity in the master programme.

Based on the figures provided in the SAR, the panel concluded that an average of 77 students apply for the programme. On average, 18 students are admitted annually. The programme targets 10 students per orientation per year. In practice, there are an average of 10 students for the Clinical Sciences orientation and eight for the Biomedical Sciences orientation. In the four cohorts to date, 44% were female. Except for one student, no students dropped out of the programme, which is commendable according to the panel.

Assessment

The panel reflected with the stakeholders on the topic of assessment. The panel commends that working with rubrics is a good practice that helps guaranteeing a transparent way of evaluating students. There are many good practices detected in how teachers' feedback to students after assessments. Nevertheless, the panel encourages all teaching staff to develop stronger structures to offer feedback proactively to students, as is the case in the MPH. The latter is already applying these structured feedback approaches. The panel also suggests considering the further extension of the role of learning and education experts in the development and coordination of rubrics, especially where multiple assessment methodologies are being used.

All programmes use a diverse range of assessment methods. These assessment methods have been explicitly mapped to the PLOs to ensure that they contribute effectively to the achievement of these outcomes by each student.

MPH

The assessments provide a range of individual and group as well as written and oral formats. To enhance the validity of the assessments, the programme implements a peer-review process for written exam questions and their corresponding expected answers. For assignment-based assessments, they establish clear assessment criteria in collaboration with supporting staff and/or use standardised rubrics. The authenticity of assignments, reflecting real-life tasks, further contributes to validity.

To ensure reliability, a minimum of two assessors evaluate each assessment, and inter-rater reliability is checked through mark comparisons. In case of divergent marks, the assessors justify, discuss, and adjust marks. Systematic divergences are analysed by programme management to address factors like unclear criteria or divergent opinions on required levels, especially when new staff or methods are introduced. The panel commends this as a good practice. While there are two examiners per assessment, these are not blinded. According to the panel, consideration may be given to how this may affect marking. It is evident that setting exams, marking, and feedback is resource-intensive and places a high demand on teachers' time.

The assessment results are communicated to students via Gradebook in Moodle. For assignments, students also receive detailed marks per criteria together with qualitative feedback indicating strengths, weaknesses, and ways to improve. The consistency of feedback may need further consideration (as highlighted in the SAR) but it is important to note the extra burden that this places on teaching staff. Teaching staff informed the panel that giving personalised, useful feedback is challenging and time-consuming.

Students informed the panel that they are invited to make appointments with the teacher to discuss their results and receive feedback. Students claim that after failing a course, teachers give feedback to make sure that students fully understand why they failed.

MGOH

The MGOH programme adopts a formative assessment approach for coursework, incorporating eight different types of assessments throughout the programme. While written-based assessments like online quizzes and individual assignments are emphasised, collaborative group work, including online discussions, group assignments, and presentations, fosters peer interaction and communication across diverse backgrounds.

The online format facilitates field research, with students eager to publish their work. While some aspects of One Health are research-oriented, such as the Anthrax investigation in Kenya, not all components follow this model.

As a joint programme between two universities, a standardised assessment concept is implemented, encompassing coursework, a thesis, and a final oral defence. Evaluation criteria are consistent across both universities, ensuring equitable treatment of students. Rubrics are used for evaluation, with follow-up discussions conducted via Zoom between teachers involved in the assignment. The panel finds the comprehensive approach to assessment, tailored to learning needs, laudable.

During discussions with the panel, staff emphasised that quality assurance systems concerning assessment of students are aligned between the two universities, a sentiment supported by alumni and students. The variety of assessment methods used throughout the programme is seen as beneficial, aligning well with the intended learning outcomes.

MTM

The assessment methods within the MTM programme are aligned with its learning outcomes, offering a diverse range of evaluation approaches. This includes a mix of written exams, practical assessments, group work evaluations, and presentations, providing a comprehensive evaluation of students' knowledge, skills, and abilities in the field of tropical medicine.

The assessment methods are clearly defined, comprising three elements: an appraisal of specific and generic competencies, the thesis, and an oral examination, with clear percentage allocations for each. Additionally, the assessment methods are varied, ensuring content validity and reliability through different systems. Like the two other programmes, the assessment systems in MTM are diverse and are perceived as very adequate by alumni, current students and staff.

Master Thesis

An important component of the three programmes is the master thesis. Each member of the panel had the opportunity to review the master theses of each of the three programmes prior to the site visit, and in the case of MTM, also both orientations of the master theses. For each of the three programmes, the panel found that the master theses are solid pieces of work that reflect the academic orientation of the programmes.

One aspect that the panel noticed is that many master thesis do not lead to publication. The panel learned that there are often good reasons not to publish: students want to have a bigger data set before publishing or combination with professional and family life makes it difficult. Nevertheless, students, alumni and staff are interested in publication. The panel suggests further reflection on guiding and encouraging students on the road to publication of theses. The panel is convinced that many of the master theses are worth to be published scientifically.

MPH

The students choose their thesis topic based on their experience and interest, and scientific and policy relevance. The end-of-year survey indicates that the students are generally happy with the thesis topic they chose and the support they received from their coach in this selection. However, some struggle to define a "feasible" topic. Consideration may be given to a more directed set of parameters within which to choose relevant topics that then allow for demonstration of the competencies corresponding to assessment criteria. The panel learned that students are, in general, satisfied with both the information regarding the thesis and the actual process. They indicate that the coaches could be assigned earlier and the methodological support, such as literature review and data cleaning, organised earlier.

Students receive language support as needed, along with both group and individual guidance. Each student is assigned a coach for personal thesis support. Surveys conducted by ITM and discussions with the panel revealed a relatively high level of satisfaction among students regarding the support they receive. However, the programme must ensure that all coaches are sufficiently accessible to students and provide the requested feedback. In most cases, students find the workload reasonable. However, the panel learned of complaints related to time constraints, including difficulties in choosing a topic, time management, meeting deadlines, and balancing coursework. Some students suggested extending the duration of the MPH programme. The panel knows the programme management is aware of issues students encounter and recommends that the programme management continue reflecting on these concerns raised by students.

The MPH examination board consists of 19 members drawn from the academic or professional international public health community. Their expertise allows for the composition of appropriate boards for each student, comprising

two senior ITM teaching staff members and two external members. To assess the achievement of learning objectives, one ITM and one external member read and mark the thesis document using an assessment grid. All four members participate in marking the thesis presentation and defence, with marks determined by consensus. Feedback provided by assessors is shared with students. The panel commends this well-functioning and structured assessment and feedback process. The programme is aware of inconsistencies, such as inadequate contextualisation and generalisation of findings in some theses and is actively working to address these issues.

For the master thesis, even in a one-year programme, the panel recommends exploring more field study types of theses. This requires elements such as early proposal development, expedited ethical approval, finances, and a backup system in case field studies cannot be conducted. The panel recommends exploring the reasons for the reduced role of fieldwork in the context of the research theses. The panel invites structured introspection into the value accorded to fieldwork in achieving the learning outcomes, and to weigh this against logistical as well as academic factors involved.

MGOH

The master thesis is evaluated separately by two members of the Examination Board, an internal reader and an external reader. Each reader independently assesses the document without any contact with the author, assigning a score on a scale of 20 points. The average of the reader scores is taken as the final score for the thesis document, which accounts for 45% of the final mark. When there is a substantial difference between the scores of both readers (a difference exceeding four points), the chairman, in consultation with the readers, will attempt to reach a consensus. If this should be impossible, the chairman can appoint a third independent reader.

The oral defence takes 30 minutes and is conducted using Zoom and is open to the public. Before the start of the defence, the student gives a 20 minutes PowerPoint presentation of the research project. The defence starts with an in-depth question and answer session on the thesis document. After the defence, all members of the examination board give a score on the student's ability to present and defend the thesis. An average is taken of all scores given for the presentation and the answers provided by the student. This score makes up 5% of the final mark for the degree. The panel supports this structured assessment process.

Alumni express satisfaction with their master theses. Some have indicated to the panel their interest in publishing their work. The panel observed that most master theses focus on animal health rather than One Health. The panel recommends expanding the range of topics to include more in the field of One Health.

MTM

The master thesis process comprises two main components. The first part is the master thesis seminars, during which students publicly present their master thesis research proposal and contextualise it within the broader field of tropical medicine and global health. The second part is the thesis itself, where students apply a specific methodology to a research question or hypothesis based on their original clinical or biomedical research question in the field of tropical medicine. Fieldwork may be an integral part of the master thesis.

The examination board for the final defence consists of four members: two from ITM and two external international members. The composition of the examination board is largely specific to the orientation and adapted to the thesis domain. The examination board assesses participants' achievements in relation to the learning objectives of the master thesis, considering orientation specificity in the application of concepts, theories, and methods. Two members (one from ITM and one external) assess the thesis text, with their consensus determining the participant's mark. For the thesis seminars the MTM has a jury board with 3 members (one from each department and the English coach). Four members assess the thesis presentation, which serves as the final oral exam, with their consensus also determining the student's mark. The panel supports this structured assessment process.

Students mentioned to the panel their interest in practical fieldwork. However, due to the heavy study load, they perceived the allocated time for research as rather short. The panel requests that the programme management explore possible solutions within the timeframe of the programme. Additionally, the panel learned that multiple students are interested in publishing their theses if given the opportunity to do so.

Staffing

In the SAR, a clear overview is provided of the available staff, including their backgrounds and expertise. It is evident to the panel that each of the master programmes at ITM can rely on a highly knowledgeable staff.

During the site visit, the panel met highly dedicated and committed staff who, in general, are highly skilled for their roles. In areas where the programmes feel their own staff may not cover current relevant topics, they rely on hiring external experts. Incorporating external lecturers allows ITM to enrich the curriculum by bringing diverse professional and research experiences into the classroom. The panel sees this as a robust approach to ensuring that students learn from experts in the field. However, there is a need to ensure a balance in the types of alumni expertise engaged, appropriately balancing research and practice orientations. The panel recommends safeguarding a good balance, assuring enough in-house expertise.

The panel noticed that staff integrate research very well into their teaching, which is commendable. The panel observed a pre-existing tension and trade-offs between research and teaching for the three programmes, which is a common phenomenon. Continuing to value research and teaching equally will be crucial.

The panel was pleased to learn that ITM intends to focus on further structural development in teacher training. Through discussions with teaching staff, the panel discovered their openness to learning about current teaching and assessment methods. It is evident to the panel that ITM possesses a culture of and commitment to quality education. Educational knowledge and expertise are clearly present among staff, with qualified staff available to support the teaching staff. The inclusion of learning and teaching experts is highly welcomed, and the panel recommends further exploration and integration of their role, along with providing teaching support and professionalisation to alumni guest lecturers. Strengthening the sharing of educational expertise among teaching and supporting staff from the three departments is recommended by the panel. A continuing education strategy, possibly including peer support, review, and self-reflection, can optimise the educational work at ITM.

According to the panel, a strength lies in the highly needs-based approach to staff professionalisation at ITM, facilitated by staff involvement in education and the institution's relatively small size, which makes it easier to identify those needs. However, overall, staff participation in these activities is limited. Therefore, it has been noted that a more structured and formal offering to teaching staff might be necessary to provide quicker and more proactive support in teaching and learning responsibilities. Despite a strong culture of consultation and experience sharing, staff professionalisation at ITM could benefit from a more structured and proactive approach. The panel was pleased to learn that ITM plans to further enhance the educational skills and competences of its lecturers for the three programmes, strengthen the shift to more student-centred methods and further use technology to support hybrid collaborative learning.

MPH

It was clear that the teachers in this master enjoy teaching and value their contributions to capacity building. However, 38 out of 67 staff members are Belgians, and in total, 85% are European. The panel suggests more diversity in the background of the teaching staff. The programme management acknowledges they did not internationalise with staff from outside Europe, but they engage them in collaborations within the programme.

During the site visit, it became clear to the panel in their discussion with programme management and staff that the teachers are often from the alumni network involved as guest lecturers. It is clear to the panel that alumni enjoy the opportunity to teach and engage with students. Although reliance on such a network is commendable on the one hand, it can be questioned if these guest lecturers are fully aware of all teaching and learning processes of the programme, including the teaching skills. As mentioned above, the panel asks for awareness on guaranteeing the didactic competencies of the guest lecturers.

MGOH

The panel learned from its discussions with the teaching staff and the programme management that staff from UP bring a wide range of purely veterinary disciplines, such as expertise in virology, parasitology, bacteriology in livestock, companion animal and wildlife host, and vector ecology. ITM's staff complement this with their

expertise on zoonotic pathogens, mostly in the human host, and this mainly from a biomedical, clinical and public health perspective.

Students testify during conversations with the panel that the staff at UP are less proficient in providing feedback and interacting with students in the context of assessment and evaluation of students. This includes responsiveness to emails and other forms of communication, which is key to effective online learning (see infra).

The panel learned that the teaching staff of both institutions are sometimes present in each other's lectures to see each other's teaching quality. The panel finds it commendable that the teaching staff of both institutions really work together in specific course modules. This includes thesis topics with a supervisor of both institutions, if possible.

MTM

The panel was pleased to observe an enthusiastic and dedicated staff actively engaged in the continuous development of the programme. The panel finds this commendable and considers it an important feature contributing to the success of the programme. Both current students and alumni express enthusiasm for the programme's teaching staff, noting that the enthusiastic staff provides optimal opportunities for achieving the learning outcomes.

Support services

The panel reserves its strongest commendation for the effectiveness of the supporting services for the three master programmes, which are described as the cornerstone of the programmes. During the site visit, stakeholders expressed enthusiasm for the student services, highlighting their proactive and professional approach in areas such as housing arrangements, information provision, mental health support, visa assistance, and financial matters. While some students expressed a need for more places to meet and study in the evenings, overall satisfaction with ITM's mental health support was noted.

The flexible and individualised study tracks of the programmes are praised and valued by students and stakeholders. However, it was observed that these tracks place an additional burden on support services, which the panel suggests that may need to be addressed.

In recent years, ITM has heavily invested in digitisation, providing relevant and detailed information about the three programmes and individual course components. The IT department collaborates closely with the Teaching and Learning experts and programme managers to explore and adopt new educational technologies, providing technical advice and support. Moodle serves as the platform for course delivery, collaboration, and assessment, offering a dynamic and interactive learning experience.

ITM uses an in-house, customised Student Information System ('Archie'), which manages the full student lifecycle and serves as the backbone for educational data management. This system facilitates student application, support services, and data tracking, ensuring efficient and up-to-date student management. Stakeholders from the three master programmes praised the functionality of this system during the site visit.

MPH

An academic English course before the start of the MPH targets non-native speakers. During the programme, they receive feedback from a language teacher on their papers and the introduction of the thesis. Additional optional language support is provided by a Fulbright fellow. The panel supports this approach. In a focus group discussion at the end of 2022-2023, non-native English-speaking students indicated that following the programme in English is challenging, but also a huge opportunity to learn the language. They appreciate the academic English course and the writing support although some support comes a bit late.

The MPH students spend one academic year in Antwerp, which implies that many leave their families to live in an unknown country with a group of culturally diverse peers. This can lead to tensions. Some students experience major stress due to pregnancy, giving birth, illness, the loss of a family member or conflicts in their country. The

panel learned that the programme monitors the well-being of its students through many channels and provides timely medical, psychological and social support via a range of staff and professional care providers.

MGOH

A student wellbeing coach has been added to the programme support team. The wellbeing coach is a certified psychologist who works as a postgraduate student advisor at the Veterinary Science faculty of UP. Alongside the wellness coach, teachers provide instructions to students about meeting deadlines as well.

Students and alumni informed the panel that ITM has an excellent student support service, which is highly accessible and well-regarded by students. However, students mentioned a lack of support from UP - emails were sometimes not responded to, or untimely, and they experienced IT problems. While students work with two platforms for certain components, they do not find it overly cumbersome.

The panel observed some inconsistencies in stakeholders' experiences of the academic as well as support services between ITM and UP. The panel encourages the programme management to establish stronger systems to monitor and address such inconsistencies, which would be normal and expected in the context of an international collaboration. The panel learned that teaching staff and programme management are not fully aware of the perceived strong differences in support. Therefore, the panel recommends investigating these differences as they currently lead to student frustration.

Facilities

The ITM campus infrastructure includes three auditoria, rooms for interactive group work, accommodating a maximum of 45 students. All lecturing rooms are equipped with amplification, projection, and internet access. During the Covid-19 period, most rooms have been converted into 'Zoom-rooms' to facilitate hybrid and online teaching. The IT Department has developed a system that provides staff with a 360° view of each room, along with information about the audiovisual infrastructure and how the equipment in the room can be used.

ITM has two laboratories dedicated exclusively to teaching purposes, primarily used by the MTM and MGOH programmes. These laboratories can accommodate two groups of up to 24 students simultaneously. They are equipped for hybrid laboratory teaching, featuring a smart board connected to a microscope with a camera for streaming images via Zoom, an iPhone for close-up filming and streaming of laboratory techniques, and an audio setup that enables hands-free communication with remote students.

In addition to these laboratories, students can receive practical laboratory training in the Biomedical Sciences Department's research laboratories. Here, students are integrated into research units for laboratory work, often as part of their Master thesis. These laboratories are equipped with specialised and basic materials necessary for advancing understanding of genetics, biochemistry, and cell biology of pathogens.

The ITM Library serves as a significant repository of knowledge and resources supporting academic and research endeavours in various fields including tropical medicine, global health, epidemiology, communicable and parasitic diseases, microbiology, parasitology, medical entomology, tropical nutrition, tropical veterinary medicine, and animal husbandry. The library houses a comprehensive collection of approximately 25,000 print books, 5,000 e-books, and 10,000 e-journal subscriptions, along with access to major scientific databases like Web of Science, Medline Ultimate, and UpToDate.

The panel acknowledges the presence of very adequate facilities, as confirmed by discussions with current programme participants and alumni. Students have expressed the desire for extended access to the library and the availability of rooms for social activities in the accommodation. While these concerns were noted, initiatives are already in place to address them, as confirmed during the site visit.

Information

The panel was eager to know if information regarding the quality of the programme is publicly accessible. The panel learned that objective information about the quality of the programmes is available on the website. The panel noticed, for instance, an evaluation that was done in 2021. Nevertheless, the panel recommends the provision of more objective information on the quality of the programme in a more structured and user-friendly way, based on the most recent outcomes on quality assurance. The panel suggests publishing a document with the yearly results on quality assurance on the website.

The panel also examined whether the three programmes provided comprehensive and readable information on all stages of the study. The panel commends the information available on the websites of the three master programmes. These provide a clear overview of the three programmes, as attested by the students with whom the panel spoke during the site visit. The learning outcomes and other practical information are presented on the website, aiding students in gaining a clear understanding of what to expect in the programme. However, the information on the websites of ITM and UP is not entirely consistent. The panel recommends aligning this information fully to eliminate any potential confusion.

The panel observed that students have access to all relevant learning materials via Moodle, where teaching staff actively communicate with students about the course content. Additionally, students are well informed about all the regulations outlined in the education and examination regulations.

Conclusion

Although the three master's programmes at ITM are different in terms of design and target audience, they share a similar embedding within ITM's structures in terms of framework and quality assurance. Quality assurance and the involvement of all stakeholders in the quality assurance process are strong. The programmes show a comprehensive and self-critical approach in their SAR, with ongoing efforts to address weaknesses.

Active learning methodologies are highly participatory, with teachers and students learning from each other. The integration of AI into the curriculum is praised, highlighting the programmes' commitment to innovation and student empowerment. The teaching and learning experts with the support of IT play a crucial role in facilitating participatory learning, emphasising the collaborative nature of academic and support functions.

In terms of assessment, there is a suggestion to encourage more publications of master theses, as they are often of high quality. Working with rubrics ensures transparency in evaluation, though there's room for improvement in proactive feedback structures in some programmes. Strong support services are commended for their proactive and professional approach, particularly in areas such as housing, mental health support, and visa assistance.

Regarding staffing, there is a culture of quality and commitment evident within the programmes. Educational knowledge and expertise are abundant among staff, including support for teachers. The inclusion of learning and education specialists is encouraged, with a suggestion to integrate their role further. While external experts are used for relevant topics, there is a need to balance research and practice orientations among alumni lecturers.

In terms of information provision, it is noted that learning outcomes are well understood by both students and teaching staff, with clear information available on the website. However, the programmes can enhance the structured presentation of programme quality information based on recent quality assurance outcomes.

Overall, the programmes demonstrate a commitment to quality education, stakeholder involvement, and innovative teaching methods. All three programmes succeed in achieving their learning outcomes. The alumni proved that the programmes contributed to achieving the skills they need to be relevant, and responsible professionals. With continued dedication to improvement, the programmes can further enhance their effectiveness and impact.

Although ITM's three master's programmes are strong quality programmes, there are still areas for improvement. Thus, MPH has to consider the reasons for the reduced role of fieldwork in the context of the master theses. Structured introspection into the value accorded to fieldwork in achieving the learning outcomes and weighing this against logistical as well as academic factors involved is recommended. In the MTM programme the relatively crowded character of the curriculum is noted. In this context, the programme management is invited to consider taking a step back and examining the broader goals and structure of this course. This might involve adopting a problem and process-driven approach to designing course components rather than the current encyclopaedic approach to diseases, including emerging diseases. Additionally, greater consideration of integrated person-centred health care, public health, primary health care approaches, and the realities of multimorbidity is encouraged as potential foundational frameworks. The MGOH has to explore deeper and broader integration of One Health principles and frameworks across all aspects of the curriculum, including module nomenclature, module content, assessments, and theses. Observations were made regarding some inconsistencies in stakeholders' experiences of the academic as well as support services between ITM and UP. It is encouraged for programme management to establish stronger systems to monitor and address such inconsistencies.

The panel finds that the Master of Science in Public Health meets the review principles. The panel therefore gives a positive final judgement.

The panel finds that the Master of Science in Global One Health: diseases at the human-animal interface meets the review principles. The panel therefore gives a positive final judgement.

The panel finds that the Master of Science in Tropical Medicine with orientations 'Clinical Sciences' and 'Biomedical Sciences' meets the review principles. The panel therefore gives a positive final judgement.

Summary of the commendations

Generic

- The SAR has an exemplary self-critical approach. The three programmes describe openly and explicitly weaknesses that they detect, based on their internal QA procedures. The self-critical reflections presented by the programmes in the SAR are always based on findings derived from QA tools that the programme, centrally coordinated by ITM, use.
- The three programmes involve all stakeholders in both internal and external QA processes.
- The openness to optimise the tools used to measure the quality of the three programmes shows a high degree of maturity of QA.
- There is information available on the websites of the three master programmes. These provide a clear overview of the three programmes, including the learning outcomes and other practical information.
- There is a proactive approach on guidelines for the use of AI.
- Staff integrate research very well into their teaching.
- The supporting services for the three master programmes are the cornerstone of the programmes. There is a proactive and professional approach in areas such as housing arrangements, information provision, mental health support, visa assistance, and financial matters.

MPH

- The programme benefits from excellent teaching and learning support, ensuring active learning and an appropriate learning environment. There is creative thinking regarding content, delivery modalities, assignments, and group activities.
- Two assessors evaluate each assessment and inter-rater reliability is checked through mark comparisons.
- For the master thesis there is a well-functioning and structured assessment and feedback process.

MGOH

- The setup of the programme is a dedicated model that looks at the soft skills of students.
- The approach to assessment is comprehensive and tailored to the learning needs.

MTM

- Almost no students drop out of the programme.
- The teaching and learning environment is characterised by a vision of interaction, exchange of experiences, and critical reflection.
- There is an enthusiastic and dedicated staff that is actively engaged in the continuous development of the programme.

Summary of the recommendations

Generic

- Provide objective information on the quality of the programme in a more structured and user-friendly way, based on the most recent outcomes on quality assurance.
- Further explore and integrate the role of educational experts, along with providing teaching support and professionalisation to alumni guest lecturers.
- Safeguard a good balance assuring enough in-house expertise.

MPH

- Continue reflecting on the concerns raised by students about the master thesis.
- Explore more field study types of master theses. Explore the reasons for the reduced role of fieldwork in the context of the research theses.

MGOH

- Develop stronger structures to offer feedback proactively to students.
- Explore deeper and broader integration of One Health principles and frameworks across all aspects of the curriculum, including module nomenclature, module content, assessments, and theses.
- Investigate the differences between the two institutions concerning student support.
- Align information about the programme on both institutions' websites.

MTM

- Initiate processes to merge the two orientations, including adjusting the PLOs.
- Examine the broader goals and structure of programme. This might include taking a problem and process-driven approach to design course components as opposed to the current encyclopaedic approach to diseases.
- Give greater consideration to integrated person-centred health care, public health, primary health care approaches, and the realities of multimorbidity, as potential foundational frameworks.
- Do prospective market research on future demand for specific clinical and laboratory-related skills in the context of a fully-fledged master programmes - given a decline in the number of full-time enrolments.
- Develop stronger structures to offer feedback proactively to students.

Annexes

Annex 1: Administrative details of the programmes.

Name of the institution	Institute of Tropical Medicine
Address, phone, e-mail, institution website	Nationalestraat 155, 2000 Antwerpen www.itg.be Tel: +32 (0)3 247 66 66 E-mail: dirsec@itg.be
Name, function, phone and e-mail of the contact person	Bruno Broucker, Policy Advisor Education bbroucker@itg.be Tel: +32 (0)3 345 55 61
Name of the programme (degree, qualification)	Master of Science in Public Health
Tracks	/
Level and orientation	Master after master programme, level 7
(Parts of) field(s) of study	<ul style="list-style-type: none">- Medicine (Geneeskunde)- Social Health sciences (Sociale gezondheidswetenschappen)- Political & social sciences (Politieke en sociale wetenschappen)- Applied sciences (toegepaste wetenschappen)
Language of instruction	English
The location where the programme is organised	Antwerpen
Study load (in ECTS)	60 ECTS

Name of the institution	Institute of Tropical Medicine
Address, phone, e-mail, institution website	Nationalestraat 155, 2000 Antwerpen www.itg.be Tel: +32 (0)3 247 66 66 E-mail: dirsec@itg.be
Name, function, phone and e-mail of the contact person	Bruno Broucker, Policy Advisor Education bbroucker@itg.be Tel: +32 (0)3 345 55 61
Name of the programme (degree, qualification)	Master of Science in Tropical Medicine
Tracks	Clinical Sciences Biomedical Sciences
Level and orientation	Master after master programme, level 7
(Parts of) field(s) of study	<ul style="list-style-type: none"> - Biomedical sciences (Biomedische wetenschappen) - Pharmaceutical sciences (Farmaceutische wetenschappen) - Medicine (Geneeskunde) - Sciences (Wetenschappen) - Applied biology (Toegepaste Biologische Wetenschappen)
Language of instruction	English
The location where the programme is organised	Antwerpen
Study load (in ECTS)	60 ECTS

Name of the institution	Institute of Tropical Medicine
Address, phone, e-mail, institution website	Nationalestraat155, 2000 Antwerpen www.itg.be Tel: +32 (0)3 247 66 66 Email: dirsec@itg.be
Name, function, phone and e-mail of the contact person	Bruno Broucker, Policy Advisor Education bbroucker@itg.be Tel: +32 (0)3 345 55 61
Name of the programme (degree, qualification)	Master of Science in Tropical Animal Health (“uitdovend”) / Master of Science in Global One Health: diseases at the human-animal interface
Tracks	/
Level and orientation	Master after master programme, level 7
(Parts of) field(s) of study	<ul style="list-style-type: none"> - Medicine (Geneeskunde) - Veterinary medicine (Diergeneeskunde) - Applied biology (Toegepaste biologische wetenschappen) - Biomedical Sciences (Biomedische wetenschappen)
Language of instruction	English
The location where the programme is organised	<ul style="list-style-type: none"> - Antwerpen and Pretoria - Online
Study load (in ECTS)	60 ECTS

Annex 2: Short CV panel members

Kabir Sheikh

Kabir Sheikh is professor of Global Health Systems and Policy. He leads research and teaching on health systems and policy at the UCL Global Business School for Health. He has previously held research and policy-related leadership positions in academia as well as at the World Health Organization and has served as the Board Chair of Health Systems Global. He is also currently co-chair of the NIHR Global Health Policy and Systems Research funding committee. He was also member of the 2016 ITM peer review panel.

Proochista Ariana

Proochista Ariana is professor and course director for the MSc in International Health and Tropical Medicine, Centre for Tropical Medicine and Global Health, Nuffield Department of Medicine. Her research empirically examines the relationship between processes of development and health in resource limited and transition contexts, appreciating the multidimensionality of both. Proochista holds a Masters in International Health from Harvard University, a Doctorate in International Development from University of Oxford, as well as a Post Graduate Diploma in Learning and Teaching in Higher Education, also from Oxford. She is currently a member of Oxford University Council as well as the Education and People Committees and Chairs the University Taught Degrees and Awards Panel. She is also a member of the Royal Society of Tropical Medicine and Hygiene Education Committee. Proochista teaches Masters and undergraduate students, supervises doctoral candidates, and delivers teacher training for the Medical Sciences Division, University of Oxford.

Olaf Horstick

Olaf Horstick, is a Professor for Global Health and has been for 10 years Director of Teaching at the Heidelberg Institute of Global Health, Heidelberg University, Germany. As a consultant in Public Health Medicine and a Medical Doctor, his main interest is in public health in low- and middle-income countries. With over 30 years of expertise in global public health, he has served in various capacities at local, national and international level, including work as staff member for United Nations organisations (WHO), bilateral organisations (GIZ), governmental agencies (MoH), non-governmental agencies and Academia.

He brings extensive teaching experience at both undergraduate and postgraduate levels, including in his position as director of teaching, along with numerous international collaborations. Additionally, he serves as an External Examiner for institutions like LHSTM and actively participates in evaluations of organisations and programs at multiple levels.

Jakob Zinsstag

Jakob Zinsstag, professor doctor, is a veterinarian with a PhD in tropical animal health. He spent eight years in West Africa at the International Trypanotolerance Centre in Gambia and four years as the director of the Centre Suisse de Recherches Scientifiques in Côte d'Ivoire. Since 1998 he heads a research group on human and animal health at the Swiss Tropical and Public Health Institute. Since 2011 his is deputy head of department of Epidemiology and Public Health at Swiss TPH. He focuses on the control of zoonoses in developing countries and the provision of health care to mobile pastoralists using a One Health approach. He is past president of the International Association for Ecology and Health and former president of the scientific board of the Transdisciplinary network of the Swiss Academies.

He teaches One Health and Transdisciplinary theory and methods and is lead educator of massive open access online courses. He is editor-in-chief of CABI One Health resources. He received the Meritorious Award by the World Organization of Animal Health (WOAH) in 2023. He is a member of the One Health High Level Expert Panel (OHHLEP).

Serhat Yildirim

Serhat Yildirim, MD, graduated from Ghent University Medical School in Belgium. He is currently enrolled as a graduate student in the MMSc Global Health Delivery program at Harvard Medical School and holds the Fulbright

and Fayat Scholarships. Driven by a passion for global and social health, his work primarily centres on mental healthcare with a keen focus on the availability and accessibility of such services.

Throughout his medical education, Serhat demonstrated commitment, serving as the president of the Flemish Union of Students. He actively participated in various programs, including the Fulbright Program, the International Visitor Leadership Program, and the Belgian Leadership Program. Affiliated with the Department of Public Health at Ghent University, he contributed to international working groups as a young researcher, such as the National Academies of Sciences, Engineering, and Medicine, and the European Health Parliament.

Annex 3: Visit schedule

4 March 2024

start	end	
9:00	11:30	internal consultation
11:30	13:00	programme management
13:00	14:00	lunch
14:00	15:00	students MPH
15:00	15:30	internal consultation
15:30	16:30	teaching staff MPH
16:30	17:30	programme-specific infrastructure part 1
17:30	18:15	internal consultation
18:15	19:00	alumni and professional field MPH
19:45		diner panel

5 March 2024

start	end	
9:00	9:30	internal consultation
9:30	10:30	students MTM
10:30	10:45	internal consultation
10:45	11:45	teaching staff MTM
11:45	13:30	internal consultation + lunch
13:30	14:30	students MGOH
14:30	14:45	internal consultation
14:45	15:45	teaching staff MGOH
15:45	16:30	internal consultation 3
16:30	17:15	programme-specific infrastructure part 2
17:15	18:00	alumni and professional field MTM
18:00	18:45	alumni and professional field MGOH
19:30		diner panel

6 March 2024

start	end	
9:00	10:00	supporting staff
10:00	11:00	open consultation
11:00	13:00	internal consultation + lunch
13:00	14:30	co-creative interview with programme management
14:30	15:30	final internal consultation
15:30	16:00	oral report

Annex 4: Overview of consulted documents

Generic

- Sample of minutes
- Survey of QA templates
- Reports alumni activities
- Minutes Education Policy committee
- Reports Alliance for Education
- Data staff
- Data students
- ECHE 2021-2027
- ITM institutional policy plan
- Student service evaluation
- Student guidelines regarding the use of Generative Artificial Intelligence
- Presentation AV
- MC 141123 report extract
- The quick guide of ITM Moodle
- Erasmus Policy Statement 2021 -2027
- Impact Evaluation ITM Educational Activities Scholarships_Syspons Report
- ITM Alumni Policy 2002-2026
- Institute of Tropical Medicine_Case_internationalisation
- Organogram ITM
- Examination Regulation
- Education Regulation

MGOH

1. The One Health Platform of the University of Pretoria
2. Historical information MScTAH
 - a. 2015 Curriculum of MScTAH
 - b. Curriculum MSc Tropical Veterinary Diseases option animal/human and ecosystem health
 - c. Brochure MSc Tropical Veterinary Diseases option animal/human and ecosystem health
 - d. Overview recommendations previous accreditation
 - e. Update accreditation report 2015
3. MScGOH Management & Programme-specific regulations
 - a. UP-ITM MOU collaborative degree
 - b. UP general academic regulations
 - c. UP Faculty Yearbook
 - d. Roles MScGOH management
 - e. Meeting minutes
 - i. Joint Management Committee
 - ii. Joint Steering Committee
4. Programme revisions since last accreditation
 - a. DSLO
 - b. PLO
 - c. PLO/DLO Table
 - d. Title change
 - e. Curriculum
5. Induction week programme 2023
6. Curriculum Map
7. PLO mapping study plan scenarios intake 2023
8. Study guides and material see ClickUP (DVTD driven modules) and Moodle (ITM driven modules)
 - a. Access ClickUP

- b. Access Moodle
- 9. Expertise Teaching Staff MScGOH
- 10. Country of origin of MScGOH applicants since start of the programme
- 11. Selection Procedure and Enrolment
 - a. Overview Procedure
 - b. Rubric assessment concept note
 - c. Concept note instruction students
 - d. Schedule interviews
 - e. Rubric scoring intake interviews
 - f. PV scholarship DGD
- 12. PLO mapping common study plan scenarios intake 2023
- 13. Overview of study plans MScGOH intake 2023
- 14. Progress reports
- 15. Surveys of modules
- 16. Thesis Procedure and assessment
 - a. Guidelines supervision DBS
 - b. Guidelines supervision UP
 - c. MOA supervisor-student
 - d. Overview deadlines ITM/UP MScGOH
 - e. Format mini-dissertation ITM
 - f. Format mini-dissertation UP
 - g. MScGOH template ITM
 - h. Mini-dissertation instructions examination board
 - i. MScGOH reader's report template
 - j. Guidelines oral defense students
 - k. Template Power Point
 - l. Example schedule oral defense
- 17. Overview of theses MScGOH graduates
- 18. Publications of theses MScGOH
- 19. Graduate & facilitator survey 2019
- 20. Literature References used in SAR MScGOH

MPH

- History MPH

- MPH SAR 2015
- MPH SAR Appendices 2015

- MPH Flexibility concept note_SG_ 28 06 2018
- MPH Flexibility principles BCOW 02 07 2018
- Exploring pathways for flexible MPH 27 08 2018
- MPH Flexibility infosession staff 14 12 2018
- MPH Flexibility_Feedback alumni meeting Cambodia 14 12 2018
- MPH Flexibilisation_PH seminar_ 21 05 2019

- MPH in French_Elements for decision making_BCOW_17 12 2018
- MPH in French_Elements for decision making_SG_15 02 2019
- MPH in French_Elements for decision making_AC_04 03 2019
- MPH in French_Elements for decision making_MC_06 03 2019
- MPH language policy_PH seminar_02 04 2019

- MPH language policy_DGD-ITM_05 04 2019
- MPH language policy and support_SG_21 08 2019
- MPH language strategy_Note BoG_19 09 2019
- MPH language policy and support_Note BoG_14 10 2019
- Evaluation language policy_Dec 2022
- Feedback language support_MPH 2223 Students_12 07 2023

- MPH 1920_Feedback students_06 07 2020
- MPH Programme adjustment_Steering group_10 02 2021
- MPH2122 Programme adjustment_Steering group_28 05 2021
- MPH2122 Programme adjustment_Input steering group_07 2021
- MPH2223_Programme adjustment_thesis timeslots

- Overview recent improvement measures

- Educational Assessment ITM_Report_VLUHR_May 2016
- Overview response to panel recommendations

- Evaluation summaries ACCs 2019-2020
- Evaluations ACCs_MPH 2019-2020_Summary cross cutting issues
- Survey 2_At end of course component HSHP CC1_MPH 2023-2024_Report
- HFSP4UHC Course Evaluation Summary_MPH 2022-2023
- DAC Course Evaluation Summary & discussion_MPH 2022-2023
- GH Course Evaluation Summary_MPH 2022-2023
- SRHHIV Course Evaluation Summary_Meeting_MPH 2022-2023
- NCD reflections on way forward_MPH 2022-2023

- MPH2919-2020_Feedback Students_at end MPH_07 2010
- MPH 2022-2023_Focusgroup Students_At end MPH_07 2023

- MPH Flexibility concept note_SG_ 28 06 2018
- MPH in French_Elements for decision making_SG_15 02 2019
- MPH language policy and support_SG_21 08 2019
- MPH steering group Minutes_25 08 2020
- MPH Programme adjustment_Steering group_10 02 2021
- MPH2122 Programme adjustment_Steering group_28 05 2021
- MPH2122 Programme adjustment_Input steering group_07 2021
- MPH steering group Minutes_28 04 2023
- MPH reaccreditation SG_28 04 2023

- Departmental Action Plans_Education_PH_CS_BMS_22 02 2022

- MPH2223_Examination Board_Meeting Minutes_06 07 2023
- MPH1920_Examination Board_Feedback_Summary

- Survey 1_At start of MPH programme 2023-2024_Report
- Survey 2_At end of MPH programme 2022-2023_Final Evaluation_Report

- Survey 3_One year after graduation in MPH programme 2021-2021_Report
- ITM graduates survey 2009-2020 - Selected results master MSSAT MPH graduates
- Impact evaluation (Syspons Report)

- DLO MPH_NVAO_09 03 2015
- MPH DLO PLO comparison
- Introduction MPH

- MPH2324_Programme Structure_Core_Adv CCs_Thesis_ECTS_Hyperlinks
- Students other master programme following MPH ACCs
- Flexibility in place_Mobility MPH students

- MPH Curriculummap_PLO_LO CCs
- MPH Studyplan Patterns
- MPH studyplan patterns_Examples_PLO_LO CCs

- MSc Public Health - overview course component per ITM staff (alphabetical list)
- MSc Public Health - overview ITM and EXT staff per course component
- MSc Public Health - data staff analysis
- MPH Staff_External Teaching Assignments

- MSc Public Health - data students
- MPH Admission criteria
- Exceptional Admissions to MPH_2015-16 to 2023-24

- ABC Learning Design - Framework
- MPH Overview teaching and learning methods - framework
- MPH Overview teaching and learning methods
- MPH 2121 Workload_Steering group_23 08 2022

- Criteria to award the degree of MPH
- Overview assessment methods per CC - weight
- Overview assessment methods and learning outcomes

- MPH2223 Assessment feedback Grids_templates
- MPH2223 Assessment and Assignment instructions or procedures

- MPH2223_THESIS_Thesis instructions_All Annexes
- MPH2223_THESIS_Examination Board_Guidelines and Annexes
- MPH2223_Examination Board_Points of attention for assesement_22 06 2023
- Selection 30 thesis titles (2020-2023)
- MPH2223_Examination Board_Meeting Minutes_06 07 2023
- MPH2223_T3_Thesis_writing_Programme
- MPH2223_T3_Thesis_Data analysis workshop_Programme
- MPH2223_T3_Thesis_Literature review workshop
- MPH2223_THESIS_List Members Examination Board
- MPH2223_THESIS_Schedule thesis defences_readers_board members

- MPH2223_THESIS_Assessment Grid Thesis Document
- MPH2223_THESIS_Assessment Grid Final Oral Exam
- Publication of master thesis
- ITM Policy on the responsible use of AI

- PhD obtained_2015-2023_MPH alumni
- PhD ongoing_MPH alumni
- Predoc ongoing_MPH alumni

MTM

- Macroeconomy/Toets nieuwe opleiding
- Data on the programme Master Tropical Medicine
- Verifiable facts Master Tropical Medicine
- DLR Master of Science in Tropical Medicine
- Formulier DLR vaststelling/validering VLUHR/NVAO
- Verslag Toetsingsgroep DLR Master in Tropical Medicine

- NVAO Initial accreditation report
- Postgraduate course revision concept note
- CORE MPH_IIH_equivalence
- Timeline & action plan of IIH course revision
- Challenges in IH_text for website
- IIH_student handbook 2022-2023
- Promotion PG-CIH_NL_ENG
- RIH_description
- RIH_Timeschedule
- CIH_Timeschedule
- CIH_CC1 description
- CIH_CC2 description
- CIH_CC3 description

- Tropical Medicine Discussion_MTM1_MTM2
- J&J_fellowship_agreement_signed_2023
- Brainstorming_Clinical_sciences_New_Master_April_2018
- Coordination_meeting_New_Master_draft_April_2018
- SAC_MCB_TDR_2018_April_2018
- MTM_research_orientations_Alumni_Cambodia_December_2018
- New_Master_alumni_discussion_Cambodia_December_2018
- Survey_New_MasterProgramme_Labour_market_Results_December_2018
- Survey_New_MasterProgramme_Results_December_2018
- Conceptual note on the New Master_January_2019
- Brainstorm_SCREM_New_Master_June_2018
- Master level 7 outcomes_Flemish Qualification Framework

- Promotion_MessageMaps_Nov_2019
- Campaign_text_webinar_announcement_Nov_2019
- ITM_MTM_PressRelease_Dec_2019
- MTM_social_media_visual
- Visual MTM_social_media_campaign

- MTM_webinar_announcement_Feb_2020
- MTM_kicking off_announcement_Sept_2020

- Schematic_overview_4Clusters
- MTM_programme_structure
- MTM_programme_structure_changes_IIH_RIH_CIH
- MTM_Schematic_overview_programme_4Clusters
- Curriculummap_MTM

- MSc Tropical Medicine - data staff analysis
- Tropical Medicine - overview staff per course component
- Staff expertise
- Departmental plan: Clinical sciences 2020-24
- Departmental plan: Biomedical sciences 2020-24
- ITM's strategic objectives for education

- MSc Tropical Medicine - data students
- Selection process MTM
- Exceptional Admissions to MTM
- Coordination meetings minutes, including selection

- MTM_teaching and learning methods
- Assessment_methods_MTM

- Thesis seminars 2023_Timeschedule
- Thesis_seminars_Elevator_pitch_grid_MTM_2023
- Thesis_seminars_Final_presentations_scoring_grid_MTM_2023
- Thesis seminars weeks - 2023 - 8 Report_evaluation
- MTM2223_THESIS_02 Instructions_participants_coaches_2022
- Thesis_PLOS_ONE_layout_title_body
- Thesis_Supplementary_material_PLOS
- MTM_Graduation Day_Programme_2023
- MTM_viva_Jury_MTM_2023
- Thesis defence_Photopage
- MTM2324_THESIS_04 Examination Board_Annex 05_Assessment Grid Thesis Document
- MTM2324_THESIS_04 Examination Board_Annex 09_Assessment Grid Thesis Final Oral Exam
- MTM2023 - Final Evaluation - 8 Report_evaluation
- Thesis_topics_MTM1_MTM3_supervisors and jury
- List_MTM_published_under_submission_thesis

- Self-Evaluation Report_MTM_28_replies_BARS
- Employer Evaluation Report_MTM_6_replies
- Ongoing PhD