

Mission & Vision of MSc Physics and Astronomy

Purpose:

The *mission* statement should be concise, apply to the complete program, and give a meaningful presentation of what we strive to achieve with our particular MSc program. It should last (virtually) a lifetime, and not be controversial. Notice that the mission describes the ideal situation we would like to achieve, not necessarily the current situation.

The *vision* statement applies the broadly formulated aims of the mission to our specific programme. It is presented as a list of concrete and testable targets, so that testing whether or not we accomplished the targets amounts to testing whether we accomplished our mission. The vision still applies only to the complete program as a whole. The vision may be expected to require updating every five to ten years.

The *strategy* document (to be formulated next) will detail how the targets set in the vision can be achieved within our programme. It will make concrete choices in how to organise the programme over the coming years, with the aim of achieving our mission and vision.

Proposed mission statement:

The UvA / VU Master of Physics and Astronomy offers students the possibility to pursue specialisms across the entire domain of Physics and Astronomy. Students participate in research and are trained in analytical thinking and problem-solving skills, relevant to both research and non research oriented career tracks. We provide a diverse and inclusive environment for students, staff, and faculty.

Proposed vision statement:

- 1. The program represents all the physics, astronomy, and related interdisciplinary research performed at UvA/VU and at associated institutes such as NIKHEF, AMOLF, ARCNL, QuSoft and AUMC, either in taught courses, research projects, seminars, or colloquia.*
- 2. The representation of ongoing research is part of the evaluation of the educational program by the program management team.*
- 3. Courses offered in the program place concepts in the context of developments in research.*
- 4. Students can take a combination of courses that prepare them for a career path inside and outside of academic research, for example focused on research, education, entrepreneurship, innovation, and management.*
- 5. Graduates find jobs throughout academia, government, education, communication, and commercial enterprises using their scientific skill set. The value of the program to alumni and employers is evidenced by alumni employment statistics, alumni interviews, and interviews with employers.*
- 6. All students have a sense of belonging in our institutes, classrooms and research groups, and are stimulated to learn, as evidenced by annual surveys.*
- 7. We provide equal opportunities for all qualified students to enrol and succeed in the degree program.*
- 8. Care and support is provided to students struggling with reduced mental wellbeing during the program.*

CONTEXT behind this mission and vision:

- Sentence 1 of the mission, and points 1-2 in the vision:

The first line of the mission identifies the unique selling point or distinguishing feature of our MSc programme. One of our strongest assets in Amsterdam, is that we are a joint degree program with contributions from VU, UvA and many research institutes. The benefit of this, is that we offer one of the largest variety of topics in physics and astronomy of any MSc programme in the Netherlands.

Points 1-2 in the vision indicate that to leverage this unique position, we need to enable students to explore what Amsterdam has to offer and help them choose a specialisation, while at the same time providing clear guidance to those students that already know what they want to specialise in. Conversely, we should enable all Amsterdam research groups to contribute to the MSc degree, making sure everyone is represented in some form without overloading the programme. Because staff and research groups evolve continuously, there should be a regular evaluation of the way in which the representation of research in the MSc programme is implemented.

- Sentence 2 of the mission, and points 3-5 in the vision:

The second line of the mission specifies that we offer a research-based educational programme. Furthermore, it makes explicit that we offer academic training with uses beyond a purely academic career. About half of our students currently continue towards a PhD degree, which is a very high percentage in comparison to many other MSc programmes. The other half of our students do not continue in academia, and there is consistent societal demand for these students with rigorous academic training in physics and astronomy.

Point 3 in the vision defines what it means for the programme to be research-based. Points 4-5 emphasizes that our MSc programme is not just preparation for a PhD, but is valued by students and society alike for the universal skills associated with physics and astronomy research. To benefit from this connection to societal needs, we should make explicit what societally relevant skills we can offer within a research-based educational setting.

- Sentence 3 of the mission, and points 6-8 in the vision:

The final line of the mission makes explicit that our program should provide an open and welcoming atmosphere to anyone involved, regardless of anything. This is a way of formulating our commitment to diversity and inclusivity. Diversity incorporates all elements that make individuals unique, while an inclusive environment can be defined as one in which all individuals feel safe, are treated fairly and respectfully, and have equal access to opportunities and resources.

Points 6-7 in the vision explain that for students, this also implies that all students are given equal opportunities for admission to the program for as far as the law allows it, and that all students are welcomed into our academic community, regardless of background or anything else.

Point 8 promises that we will care for and support any students experiencing trouble during their studies.