About the study program

Master in Visual Computing

What is the program about?

The Master in Visual Computing at Otto-von-Guericke-Universität Magdeburg provides you with a world class education in visual computing, with a particular emphasis on visualization, computer graphics and computer vision. With state-of-the-art facilities, a broad and research oriented curriculum and a small number of students the program provides you with an excellent preparation for your a career in visual computing in both industry and academia.

Your career options include:

- special effects for films
- computer games
- autonomous driving
- medical imaging
- augmented and virtual reality

For whom is the program?

The program is aimed at students who want to pursue a career in visual computing and have prior experience in the area. You will typically already have taken multiple courses in the field and now want to obtain in depth knowledge. You also have to hold a bachelor degree (or equivalent) in computer science, engineering, mathematics, physics or a related discipline.

How does the program look like?

The program consists of four semesters of in-class teaching and project work. The first semester lays the ground work by ensuring that you have the required breadth and depth for the remainder of the program. For this, you will take foundational courses on areas of visual computing that you haven't been exposed so far. In the second semester you will deepen your knowledge of visual computing by taking more specialized courses, for example on flow visualization, medical imaging, augmented and virtual reality, flow simulation, or object recognition. This is continued in the third semester and complemented by a research oriented project, typically taken in small groups, where you can demonstrate your ability to apply the tools of visual computing creatively to solve open ended problems. In the fourth semester your focus will be on the research for your master thesis.

For more details and a list of courses offered please see the example study plan . Students can also take courses from other departments, for example on fluid simulation, mathematics, or medical imaging subject to approval by the study program coordinator.

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