TAE Technische
Akademie
Esslingen
**Ihr Partner für
Weiterbildung**

Brunel
University
London
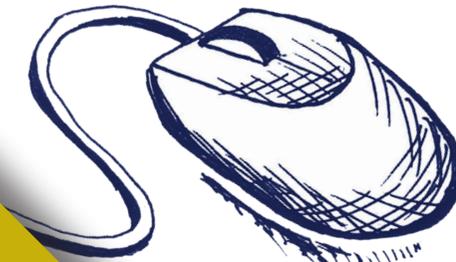
PART-TIME STUDIES

Distributed Computing Systems Engineering
(Master of Science)

in Ostfildern (near Stuttgart)

www.tae-studium.de/master

FLEXIBLE | INDIVIDUAL | PRACTICAL

We help you to reach your educational and career goals –
alongside your work

Distributed Computing Systems Engineering (M.Sc.)

Cloud computing has proven to be effective in sharing and virtualizing resources over the Internet. Many IT companies have been actively in deploying cloud computing infrastructures. In the mean time, big data has received another momentum from both the industry and academia. This course covers a range of essential topics related to distributed computing systems. The emphasis in the course is to build the connections between topics, enabling software engineers to achieve co-operation between distinct autonomous systems under constraints of cost and performance requirements.

OUR COOPERATION PARTNER

The extra-occupational master's programme Distributed Computing Systems Engineering is run by TAE in collaboration with Brunel University London.
As an internationally respected English University, Brunel University London has offered similar master's programmes for many years and has been collaborating successfully with TAE since 1994.

EMPLOYABILITY

The master's course equips you with the necessary advanced technical and professional skills for an enhanced career either in industry or leading edge research in the area of cloud computing, big data analytics, intelligent and embedded systems. Students graduated from the programme are in high demand from both industry and academia undertaking.

> **Large scale distributed computing including cloud computing and high performance computing**
> **Software engineering for distributed systems**
> **Artificial intelligence and intelligent systems**
> **Embedded systems with FPGA**
> **Computer networks and network security**

The master's degree also enables its alumni to further scientific qualification within the framework of a doctoral degree programme at a university, for example the PhD, or directly at Brunel University London.

AIMS AND OBJECTIVES

The extra-occupational programme spans three terms (18 months) including the master's dissertation which provides the opportunity to apply the knowledge learnt in the taught part of the programme and to specialize in one aspect, developing students' deep understanding and expertise in a distributed systems related area of their choice. Students may carry out their projects wholly within the university, but industrial based projects are encouraged. This future-oriented master's programme enables you specifically:

> **To critically appraise the state-of-the-art technologies in large scale distributed computing including cloud computing and big data analyitcal methods**
> **To practically examine the development of large scale distributed systems and the roles that software engineering plays**
> **To critically investigate the problems and pitfalls of distributed systems in business, commerce, and industry**

After successfully completing the master's dissertation and the colloquium, Brunel University London bestows the title "Master of Science" (M.Sc.) upon you.

WHY STUDY PART-TIME

FINANCIAL INDEPENDENCE

The master's programmes of the TAE are adapted for the compatibility of your professional career and your studies. You work full-time, at 100% salary, and study mainly on Saturdays. In doing so, you remain financially independent and reach your degree without having to give up your secure existence.

TEMPORAL COMPATIBILITY

Do not worry, you are not with us every weekend. Self-learning phases follow classroom-based sessions, and thanks to the well-developed teaching concept and the didactically well-prepeared teaching materials, the workload can be individually planned by you. Thus, you remain flexible in time and your private life does not go short.

QUALITY THANKS TO STRONG PARTNERS

During the lectures you profit from the expertise of the instructors of our renowned partner universities. Your degree is equivalent to the degree of full-time students of the respective cooperation partner and you naturally also enjoy the advantages of a large campus.

YOU HAVE PRIORITY

Our study counselors will help you personally and quickly. If you have any questions, please do not hesitate to contact us – aside from our training staff and tutors the head of each business field at TAE stands by your side. Thanks to small study groups we can respond to your individual needs. Therefore, approximately 90% of our master's students graduate from TAE.

COMPREHENSIVE STUDY MATERIAL

Our teaching material has been developed in a practical and didactic way for a extra occupational study program. All of the required books and lecture notes are included in the semester fees and pass into your ownership. Modern online platforms simplify the exchange and ensure an ideal preparation for the exam.

TAILOR-MADE STUDY

Whether you favour to retreat to self-study or prefer to work with your fellow students in learning groups, the TAE has classrooms and fast Wi-Fi on hand.

SAFETY

Our study fees cover the expenses of all the required study material. In case of unexpected occurrences such as sickness or unemployment, you can always apply for a holiday semester. In this case, your studies are not going to forfeit and will be taken into account upon resumption.

OUR EXPERIENCE FOR YOUR SUCCESS

For more than 20 years, TAE has offered bachelor's and master's degree programmes. We currently count about 400 students. As a result of the aquired qualifications, our graduates achieve a significant salary improvement.

**ONE CAREER LEVEL HIGHER –
ON FULL PAY!**

COURSE STRUCTURE

Term	Modules	Credits*
1	**Software Engineering**	15
	Network Security and Encryption	15
	Computer Networks	15
	Project Control and Management	15
	Distributed Systems Architecture	15
2	**High Performance Computing and Big Data**	15
	Embedded Systems Engineering	15
	Intelligent Systems	15
3	**Master's Dissertation and Colloquium**	60
		Σ 180

*2 credits = 1 ECTS
The lessons are mainly taught in English and part-way in German

COURSE CONCEPT

This extra-occupational master's programme targets at students who wish to complete their studies while in full-time employment. Eight taught modules are offered over the span of 16 weekends with accompanying hands-on laboratory assignments over further 7 weekends. Therefore the master's course has a good mixture of practical and theoretical lessons.

Our student groups are small so you can work effectively. Lessons on Friday are from 09:00am – 6:00pm and on Saturday from 08:00am – 05:00pm. The courses take place mostly at Technische Akademie Esslingen.

AT A GLANCE

Degree:
Master of Science (M.Sc.)

Entry Requirements
> A second class honours degree (2:2) or equivalent overseas qualification in Computer Science, Computer Engineering, Computing and Information Systems, Electronic Engineering or a related subject
> Basic programming skills are required
> English Language Proficiency: CEF Grade C1 or equivalent, IELTS score at least 6 or equivalent (for international students only)

Start Date
September 2018

Standard Period of Study
3 Terms

Fee
12,500.00 EUR

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> To the module manual

For application please visit
www.tae-studium.de/dcs