

V39.3871

Eindhoven University of Technology has a vacancy for

1 Postdoctoral Researcher on

Strategic Lifecycle Management of Capital Assets (1.0 fte)

Within the Operations, Planning, Accounting and Control (OPAC) group of the School of Industrial Engineering.

The School of Industrial Engineering is one of the longest-established IE Schools in Europe, with a strong presence in the international research and education community, especially in the field of Operations Management (OM) and Operations Research (OR). OM and OR are part of the core of the undergraduate IE program. The graduate programs (MSc and PhD) in Operations Management & Logistics attract top-level students from all over the world.

The Operations, Planning, Accounting and Control group teaches and conducts research in the area of operations planning and control in manufacturing, services, logistics, reliability and maintenance, and supply chains. Research is generally quantitative in nature, while many of the researchers also engage in empirical research. The OPAC group is responsible within the university for all teaching in the areas of operations management, transportation, manufacturing operations, reliability and maintenance, and accounting and finance, both at undergraduate and graduate level. All research is embedded in Beta, the research school for Operations Management & Logistics.

Research Project

The postdoc position is part of the MARCONI (Maritime Remote Control Tower for Service Logistics Innovation) project funded by the Netherlands Organisation for Scientific Research (NWO). MARCONI aims to develop and demonstrate innovative service logistics concepts. The ambition is to demonstrate the actual functioning of a remote service logistic control tower with the long-term goal of developing and exploiting a scalable supply chain function in the maritime world.

Strategic lifecycle management of capital assets

The postdoc position is part of the research line on lifecycle management of highly complex capital assets in maritime industry. Various technologies that underlie many components in such systems have life cycles that are shorter than the life cycle of the systems they are incorporated in. Life cycle mismatches result in high sustainment costs especially for systems with a long life cycle. Furthermore, a component may become operationally inefficient (e.g., high fuel consumption) or may not even be allowed in the system (e.g., new environmental restrictions) although it has not reached the end of its life cycle yet. This research aims to identify the optimal lifecycle management strategy in order to minimize the gap between the performance needed from a system and the performance delivered by the system.

In the project, there will be a close collaboration with the other partners of the MARCONI project: Boskalis, Damen, Gordian, IHC, Loodswezen, Maastricht University, NLDA, Thales, RH Marine, Royal Netherlands Navy and University of Twente.

Tasks & Requirements

The postdoctoral researcher is expected to do scientific research in the domain described and publish research results in scientific journals. There will be close collaboration with dr. Alp Akcay, prof.dr.ir Geert-Jan van Houtum (TU Eindhoven) and dr. Matthieu van der Heijden (University of Twente). The position requires spending 70% of the time on research and 30% on teaching activities of the OPAC group. The teaching activities include the supervision of BSc and MSc students who will work on the subparts of the project with one or more of the industrial partners.

Applicants should have completed (or be close to completion of) a PhD degree in operations management, operations research, econometrics, applied mathematics, or industrial engineering, or a

comparable domain with a solid background in (stochastic) quantitative research methods. Fluency in English is required.

Conditions of employment

We offer

- a challenging job in a dynamic and ambitious university and you will be part of the MARCONI team;
- an appointment as a postdoctoral researcher for a period of 2 years with an intended starting date of 1 September 2019; the gross salary is in the range of € 3.255,- to € 4.274,- per month (on a full-time basis);
- a broad package of fringe benefits (including an excellent technical infrastructure, moving expenses, savings schemes, coverage of costs of publishing the dissertation/scientific papers and excellent sports facilities).

Information

More information about this position and the research programs should be addressed to: dr. Alp Akcay, phone +31 40 247 2216, e-mail: a.e.akcay@tue.nl. Information about terms of employment can be obtained from the personnel office (pz.ieis@tue.nl), phone: +31 402475204. Further information about Eindhoven University of Technology can be found at <http://www.tue.nl>.

Application

Your application must contain the following documents (all in English):

- Cover letter (2 page max), which includes a motivation of your interest in the vacancy and an explanation of why you are a good fit for the project;
- An extensive curriculum vitae;
- One or more of the candidate's research papers;
- Name and contact information of two references.

If you are interested, we invite you to apply as soon as possible. Applications will be reviewed on a rolling basis. You can send us your application through the online job portal of the TU/e or click [HERE](#). Applications per email are not accepted. Please note that a maximum of 5 documents of 2 MB each can be uploaded.