## Postgraduate research topic opportunity

## **Autonomous Ford Ranger**

UKZN is pursuing collaboration with a Germany institution, to convert the Ford Ranger into an autonomous vehicle. The Germany institution's research team will investigate the artificial intelligence and autonomy system, while UKZN will pursue the mechanical, electronic and system integration.

Should you be successful with your application, you will be required to:

- Modify the mechanical aspect of the Ford Ranger to allow actuation control
- Control the actuation system with the required electronic integration.
- Integrate the mechanical and electronic system with a computer system, on which the Robotics Operating System (ROS) will be installed and the algorithms from the Germany institution will be implemented on.
- Slight modifications on the ROS to allow compatibility with the system being developed.

The successful applicant will be able to apply for the college scholarship, should they not have received any other scholarship. The following requirements are needed:

- Performance of your final year project must be above the norm.
- You need to be self-motivated, efficient and meet the required deadlines.
- There are certain expectations required from you to allow you to guarantee the completion of your degree. Further details will be sent to you regarding this.

If you are interested in applying, you are required to submit:

- Your CV and academic record
- A description of your final year project and your responsibilities
- Who was your final year project supervisor?

All submissions or further details about the research topic can be sent to Professor Riaan Stopforth at Stopforth@ukzn.ac.za.