SARF and SAICE offer the following two-day Traffic Signal Design and Intersection Optimization course. The two parts of the course will be presented on consecutive days. Delegates can however apply to register for either part of the course on one day only.

Each part of the course has been accredited for one (1) CPD point; delegates attending both days will get two (2) CPD points.

**TRAFFIC SIGNAL DESIGN**

Delegates attending this course will learn about the critical importance of designing traffic signal installations to meet the requirements of Volume 3 of the South African Road Traffic Signs Manual. Along with the Manual, the Road Traffic Act and Regulations prescribe standards and requirements which can result in severe legal and personal consequences for authorities and individuals if these are not met. The day will therefore deal with how the signal faces and poles must appear, both in general and if Bus Rapid Transit (BRT) lanes are present, and how they should be managed and maintained. In the afternoon, delegates will be given a typical intersection to design.

This course will provide delegates with all the tools necessary to design and implement safe and legal traffic signals in the field.

**INTERSECTION CONTROL DEVICE OPTIMIZATION**

This course starts with an introduction to priority, roundabout and traffic signal intersection control devices. How the best type of control, depending on the geometry and volume at the intersection, can be determined will be demonstrated. Current international best traffic engineering practices in the calculation of delay, capacity, queue length and level of service will then be discussed. The way in which these measures of effectiveness determine how the intersection will perform, depending on which of twenty-eight priority and traffic signal phasing options is selected, will be explained via a demonstration of the software program AutoJ. In the afternoon delegates are invited to bring actual traffic volumes at any intersection to demonstrate the ease with which optimal control can be determined.

Co-ordination, or synchronization of traffic signals will also be discussed.

The course will be of value to anybody undertaking or assessing traffic impact assessments, designing intersections of any type, designing traffic signal layout and timings or wanting to know about how intersections, including Non-Motorized Transport and BRT intersections, should be operated. The course caters for all levels of attendees, including students, traffic officers, technicians and qualified engineers with years of experience.

**Course Presenter**

Dr John Sampson, Pr. Eng.

**Register:**

Sybul / Tshidi  
T: 011 394 9025 / 1459  
F: 011 394 7934  
E: sybul@sarf.org.za / tshidi@sarf.org.za

**Date & Venue:** 24 – 25 October in Bloemfontein

**Fee:** Course Fees per Delegate (Including VAT)  
Sponsor R6000  
SARF/SABITA members R6700  
SAICE members R6900  
Non-members R7300