

SCOPE

The aim of the workshop is for lecturers and post-graduate students of academic institutions to present and discuss matters related to their current research, industrial projects and experience in the field of control systems. As a control systems practitioner, researcher or student you are invited to this workshop, where experts will explore relevant research and present practical lessons gained through experience.

WHO SHOULD ATTEND

- Researchers, academics, engineers, technicians, graduates, students and everyone else involved or interested in Instrumentation, Automation and Control
- Suppliers and consumers of process control equipment and technologies

VENUE

The workshop will be held in the CEFIM auditorium at the University of Pretoria – see maps on reverse side.

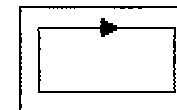
HOW TO REGISTER

Please complete the attached enrolment form and send it to Jean McKenzie
Fax: (011) 482-2000
E-mail: assoc@nafcocjcci.co.za
Invoices will be sent to delegates.
Website: www.sacac.org.za

PROGRAMME

- 8:30 **Registration (tea/coffee)**
- Session 1
- 09:00 S. Els (UP): The Ride Comfort vs. Handling Decision for Off-Road Vehicles
- 09:25 J. Tapson (UCT): Supercritical stability in sensor systems
- 09:50 E. Boje (UKZN): Recent work on power plant boiler modeling and control
- 10:15 **Tea/Coffee**
- Session 2
- 10:40 R. Tzoneva (CPUT): Applied control research for control education
- 11:05 M. Bauer (UP): Root cause analysis in the process industries
- 11:30 J. Labuschagne (UP): Startup Procedure Performance Evaluation
- 11:50 R. du Toit (UP): Assessing Regulatory Performance of Chemical Processes
- 12:10 **Lunch**
- Session 3: Feedback by students funded by SACAC to attend the IFAC World Congress in Prague
- 13:40 L. Coetzee (UP): Robust MPC control of an EAF
- 14:00 M. Jeffrey (UP): HIV/AIDS Modeling and Control
- Session 4
- 14:20 C. Kriger (CPUT): Neural network structures for prediction
- 14:40 M. Stempel (UP): Modeling and observer design for the control of long haul trains
- 14:40 **Tea/Coffee**
- Session 5
- 15:00 Q. Bart (CPUT): Hardware implementation of Neural Networks for control
- 15:20 C. Kohlmeyer (UP): Modeling and observer design for a rock drill
- 15:40 N. Mqadi (UP): Process Control in the Minerals Processing Industry with a focus on Control of Flotation Processes
- 16:00 B. Freyer (UP): Simulation of tool vibration control with a self sensing actuator in turning
- 16:20 N. Dube (CPUT): Optimal control of a counter-current ion exchange process

South African Council for Automation and Computation



Suid-Afrikaanse Raad vir Outomatisasie en Berekening

SACAC

Post-Graduate Control Systems Day

To be held at the

CEFIM Auditorium,

University of Pretoria

On

Friday, 2 December 2005

WORKSHOP FEE

SACAC members: R 600

SACAC members (alternate fees): Free for first five delegates

Non-members: R 900

Bona Fide Students/IEEE Student members: R 250

Fees include tea/coffee during the morning and afternoon breaks and a luncheon.

REGISTRATION

SACAC Control Systems Day

Enrolment Form

To: JEAN McKENZIE Fax: (011) 482-2000, E-mail:

assoc@nafcocjcci.co.za

Name 1: _____

Position: _____

Name 2: _____

Position: _____

Company: _____

Tel No: _____ Fax: _____

E-mail: _____

Address: _____

CONDITIONS OF ENTRY

1. Unforeseen circumstances may necessitate changes in topics and/or speakers.
2. Cancellations are accepted IN WRITING and without penalty, up to 7 working days prior to commencement of the workshop - SUBSTITUTES ARE ACCEPTED.
3. Delegates cancelling IN WRITING less than 7 days prior to commencement of the workshop will be liable to pay a 20% cancellation fee.
4. If prior WRITTEN notification is not received, default delegates will be liable to pay a 50% cancellation fee.
5. The workshop fee as indicated includes refreshments and luncheon.
6. In case of insufficient applications for the workshop, SACAC reserves the right to cancel the workshop. Applicants will be informed and all fees will be refunded immediately. The number of applicants on the workshop is limited and acceptance will be on a first come, first serve basis.
7. For further inquiries please contact Jean McKenzie Tel: (011) 726 5300

DIRECTIONS TO THE MAIN CAMPUS

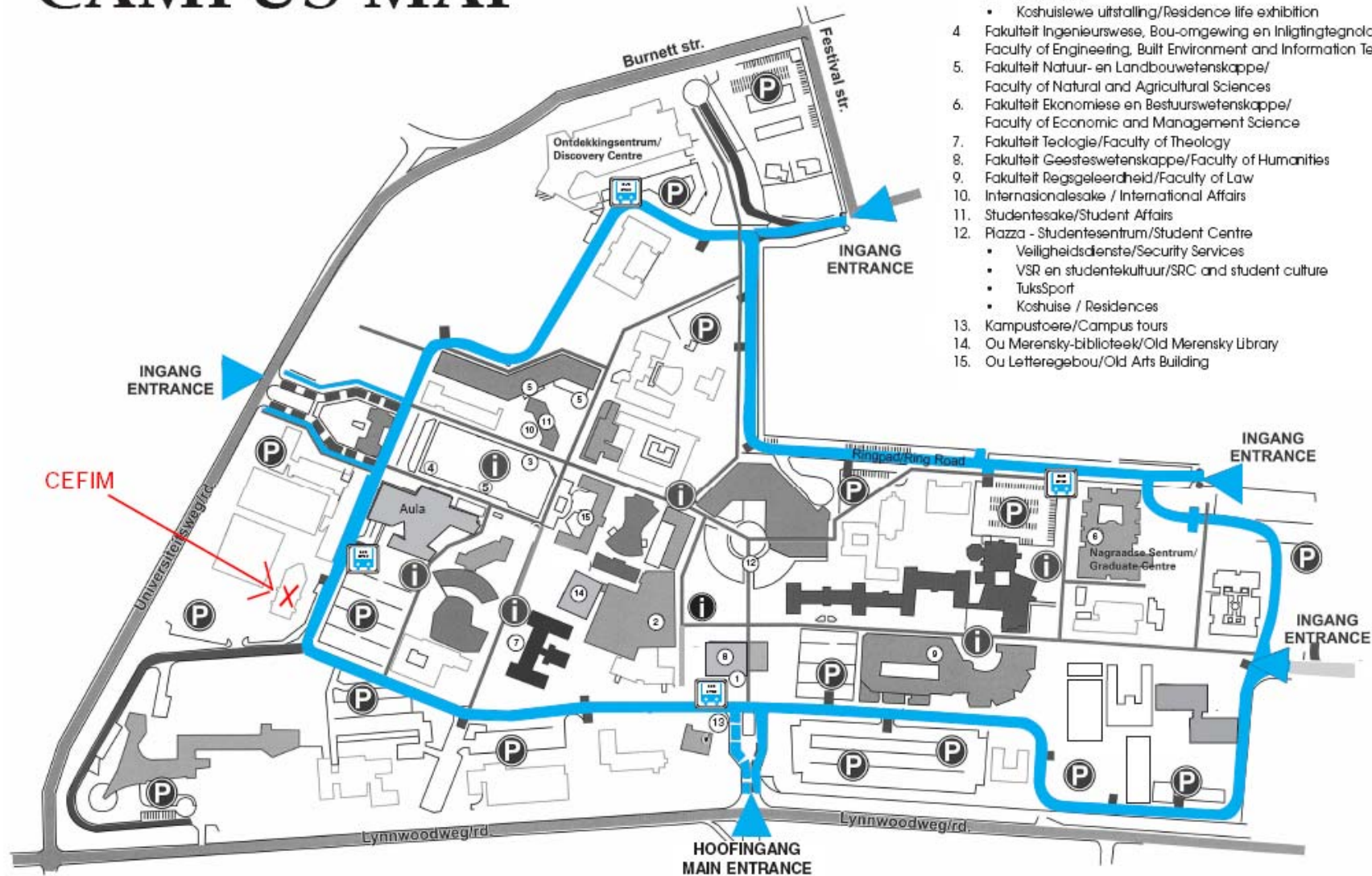
Coming from the north, the main entrance via Lynnwood Road:N1, the Pietersburg highway, will take you to the N4, the Witbank Highway and then straight into Pretorius Street. Turn left into Gordon Road, same as following, the M7, Brooklyn turn-off, (Gordon changes into Duncan Road) for 1.8 km. (You'll cross several traffic lights.) You are now at the Lynnwood Road traffic light. Turn right and continue 0.8 km. You are now at the traffic light at the main entrance. Turn right.

Coming from Johannesburg: N1, take the Lynnwood road off-ramp. At the top of the off-ramp, turn left. Continue along Lynnwood road until you see the University of Pretoria main entrance to your right.

Coming from the Johannesburg National Airport: The Pretoria off-ramp at the airport will take you to Fountains Circle. Take the Groenkloof or Brooklyn off-ramp (about 270 degrees around the circle). In George Storrar Drive, drive 2.6 km and turn left into Queen Wilhelmina Drive. Continue 1.1 km, turn right into Nicolson Street, continue 0.6 km turn left into Roper and you'll reach the main entrance (1.1 km, at the end of Roper) in Lynnwood Road.

Coming from the west: From Schoeman Street, turn right into Hill Street, continue 0.8 km (there is a bend to the left after 0.3 km into Burnett Street, you'll cross several traffic lights). Turn right into Roper Street, entrance to the right after 0.1 km, the service entrance, at the corner of Roper and Prospect Streets.

KAMPUSKAART/ CAMPUS MAP



1. Kliëntedienssentrum (KDS)/ Client Service Centre (CSC)
2. Akademiese Inligtingsdiens (AI)/Academic Information Service (AIS)
3. Markiestent op grasperk voor Aula/Marquee tent on lawn in front of Aula
 - Fakulteit Gesondheidswetenskappe / Faculty of Health Sciences
 - Fakulteit Opvoedkunde / Faculty of Education
 - TuksAlumni
 - Koshuiselewe uitstalling/Residence life exhibition
4. Fakulteit Ingenieurswese, Bou-omgewing en Inligtingtegnologie / Faculty of Engineering, Built Environment and Information Technology
5. Fakulteit Natuur- en Landbouwetenskappe/ Faculty of Natural and Agricultural Sciences
6. Fakulteit Ekonomiese en Bestuurswetenskappe/ Faculty of Economic and Management Science
7. Fakulteit Teologie/Faculty of Theology
8. Fakulteit Geesteswetenskappe/Faculty of Humanities
9. Fakulteit Regsgesleerdheid/Faculty of Law
10. Internasionalesake / International Affairs
11. Studentesake/Student Affairs
12. Plaza - Studentesentrum/Student Centre
 - Veiligheidsdienste/Security Services
 - VSR en studentekultuur/SRC and student culture
 - TuksSport
 - Koshuise / Residences
13. Kampustoere/Campus tours
14. Ou Merensky-biblioteek/Old Merensky Library
15. Ou Letteregebou/Old Arts Building