



histories and examples from industry will also be presented by speakers from ROMAC industrial members. Participation in these short courses is held for representatives of ROMAC member companies, but is also open to non-members. These short courses are tutorial in nature since current research topics are discussed at the annual meeting.

ROMAC personnel are available to offer short courses on request throughout the year. Course topics can include Introduction to Advanced Rotordynamics and/or Magnetic Bearings. Courses can take place at the ROMAC labs at the University of Virginia, member locations, or other locations more convenient to attendees.



FIVE DAY SHORT COURSE July 17-21, 2017

\$1,400 per member \$2,800 per NON-member
*Course material, parking, breaks
and lunch is included.*

**Monday, July 17 – 7:30 am Registration
8:00 am Course begins**

Friday, July 21 – 12:00 pm Course ends

This rotordynamics and magnetic bearings short course will include presentations by University of Virginia faculty and graduate students. Case histories and examples from industry professionals will also be presented by speakers from ROMAC industrial members.

This course is open to members and non-members of ROMAC.

COURSE OUTLINE

- Introduction to rotor dynamics
- Introduction to bearing dynamics
- Introduction to magnetic bearings
- Applied rotor dynamics for industrial rotors
- Stability of industrial compressor rotors
- Advanced fluid film bearing analysis
- Compressible flow seals
- Rotor dynamics of turbomachines
- Optimization techniques in rotordynamics
- Dynamics of aircraft engines
- Support stiffness effects
- Torsional vibrations
- Rotordynamics of motors & turbine generators
- API specifications for rotor dynamics
- Rotor rubs
- Squeeze film dampers
- Specifications for magnetic bearing rotors
- Geared systems
- Test rigs for rotordynamics
- Field measurements of industrial rotors
- Use of Rotordynamic Codes

There is a wide variety of lodging available in Charlottesville and around the University of Virginia. The following list of options are on the Charlottesville Area Transit (CAT) line that offers free bus service to the U.Va Grounds...except the Holiday Inn & the Inn at Darden.

[The Oakhurst Inn](#)

A boutique Hotel – Closest to ROMAC Lab (5 min walk)

[Hampton Inn & Suites Charlottesville-At the University](#)

A corporate reservation site for area Hampton Inns

[Courtyard Charlottesville - University Medical Center](#)

Direct to the hotel website

[Omni Charlottesville Hotel](#)

Direct to the hotel website

[Holiday Inn Charlottesville-University Area](#)

Direct to the hotel website

[The Inn at Darden](#)

Direct to Inn website

ROMAC supports cooperative research efforts conducted by faculty, and students in the Mechanical and Aerospace Engineering Department and the Electrical and Computer Engineering Department at the University of Virginia. The ROMAC Industrial Consortium emphasizes theoretical and experimental research in general areas of rotordynamics, turbomachinery, structural dynamics, magnetic bearings, the application of automatic controls to the dynamics of rotating machinery, internal incompressible flows, the coupling of internal flows to the dynamics of rotating machinery, fluid film bearings, and seals.

The interaction between industry and university professionals through the medium of ROMAC provides the university researchers with an understanding of practical industrial problems with rotating machinery while the industrial participants obtain very timely research results.

ROMAC SHORT COURSES

ROMAC sponsors periodic short courses on topics of interest to the member companies. The courses cover topics in rotordynamics, bearing and seal dynamics, magnetic bearings, and applied dynamics for industrial rotors. The course will include presentations by University of Virginia faculty and graduate students. Case



Expected Industry Speakers

- **Richard Armentrout**, Ph.D., P.E., Fellow Engineer, Curtiss-Wright Electro-Mechanical Corp.
- **Hunter Cloud**, Ph.D., President BRG Machinery Consulting
- **Scan DeCamillo**, PE, Manager Research and Development, Kingsbury, Inc.
- **Mihui He**, Ph.D., Machinery Specialist, BRG Machinery Consulting
- **Ed Memmott**, Ph.D., Principal Rotor Dynamic Engineer, Dresser-Rand A Siemens Business

University of Virginia Speakers

- **Houston Wood**, Professor, ROMAC Director
- **Roger Fittro**, Sr. Scientist, ROMAC Assoc. Director
- **Zongli Lin**, ECE Professor
- **Bob Rockwell**, MAE Sr. Scientist
- **Michael Branagan**, MAE Ph.D. Student
- **Neal Morgan**, MAE Ph.D. Student
- **Benny Schwartz**, MAE Ph. D. Student
- **Cori Watson**, MAE Ph.D. Student

*speakers may change

Continuing Education Units
are available for the
ROMAC Short Course



SHORT COURSE 2015

FIVE- DAY SHORT COURSE JULY 17-21, 2017

Registration Deadline: June 30, 2017

\$1,400 per member \$2,800 per NON- member

*Course material, parking, breaks
and lunch is included. Each dinner is on your own.*

COMPANY NAME: _____

ADDRESS: _____

CITY STATE ZIP _____

ROMAC Member? Yes No

1st Attendee: _____

Name for Nametag: _____

Email Address: _____

2nd Attendee: _____

Name for Nametag: _____

Email Address: _____

3rd Attendee: _____

Name for Nametag: _____

Email Address: _____

Please send completed registration form to:

Email: romac@virginia.edu

Fax: 434-982-2037

Mail to:

Lori Mohr Pedersen
ROMAC Office Manager
University of Virginia

PO Box 400746 | 122 Engineer's Way
Charlottesville, VA 22904

5-DAY COURSE FEE: _____

TOTAL AMOUNT DUE: _____

UPON REGISTRATION AN INVOICE WILL BE SENT

PREFERRED METHOD OF PAYMENT
CHECKS TO UVA MAE ROMAC OR ACH OR WIRE
TRANSFER – DETAILS WILL BE ON THE INVOICE

*Course materials, lunch, breaks and parking
are included in the cost of the Short Courses*

If you have questions contact Lori Mohr Pedersen at
lamp@virginia.edu or 434 924 3292

