



ENGINEERING

Department of Mechanical and
Aerospace Engineering
Rotating Machinery and Controls Laboratory

ROMAC Lab Short Course

The Rotating Machinery and Controls Laboratory and Consortium (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.

FIVE DAY SHORT COURSE July 9-13, 2018

\$1,500 per member
\$3,000 per NON-member
*Course material, parking, breaks
and lunch is included.*

Monday, July 9 – 7:30 am Registration
Mon–Thurs 8:00 am - 5:00 pm
Friday, July 13 – 12:00 pm Course ends

This rotordynamics and magnetic bearings short course will include presentations by UVA faculty and graduate students. Case histories and examples from industry professionals will also be presented.

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

ROMAC Short Course Registration

Please complete registration form on line at this [link](#) or on the other side of this brochure and return it using one of the below options:

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 ROMAC or ACH or Wire Transfer – Details will be on the Invoice

Course materials, lunch, breaks and parking are included in the cost.

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

Registration Form

**FIVE- DAY SHORT COURSE
JULY 9-13, 2018**

Registration Deadline: June 30, 2017

**\$1,500 per member
\$3,000 per non-member**

Course material, parking, breaks
and lunch is included.
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: _____



Getting to Charlottesville

The closest airport is Charlottesville Albemarle Airport (CHO) and is nine miles away and about a 20-25 minute drive.

Richmond International Airport is about 85 miles away and about a one hour 20 minute drive.

Dulles International Airport is about 103 miles away and a 2 hour drive.

Staying in Charlottesville

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

Industry Speakers

Richard Armentrout PhD 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.

Ed Memmott, Ph.D., Retired
Principal Rotor Dynamic Engineer,
Dresser-Rand A Siemens Business

University of Virginia Speakers

Roger Fittro, Sr. Scientist
ROMAC Assoc. Director

Zongli Lin, ECE Professor

Minhui He, MAE Senior Scientist

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 are subject to change without notice.