

RTEMS Open Class

April 2-4, 2002

Bevill Center
On the campus of the
University of
Alabama—Huntsville

Huntsville, AL
USA

Group Dinner Wednesday April
3, 2002
Wildflower Café
Included in Class Fees

Registration Deadline:
March 22, 2002

A minimum of 10 attendees is
required to hold the class.

*Excellence in Real-Time
Embedded Systems*

RTEMS Open Class—Three Courses in One

The Real-Time Introduction is a comprehensive investigation of the requirements of real-time systems including explanations of various related topics. Embedded systems, real-time system characteristics, hard versus soft real-time, criticality are all examined in this section. It also compares the differences between a real-time operating system and a real-time executive by demonstrating the capabilities and benefits of each. This introduction discusses the tremendous benefits of portable code and explains the different levels of portability. Cross development is another important aspect of embedded systems dealt with in this class. This explanation includes discussions of host versus target platforms as well as cross development tool-sets like GNU. The Real-Time Introduction concludes with a section illustrating the concepts behind real-time tasking design, which defines a real-time task and its attributes such as priority and concurrency.

The POSIX class is an overview of the POSIX API and its ability to interact with the RTEMS environment. The class specifically covers the functionality and capability of the POSIX1 and 1b programming library. The full spectrum of POSIX concepts are presented, from basic terminology and general requirements to focused issues like processes and threads, synchronization, memory management, message passing, and device specific functions. This curriculum also addresses the means by which POSIX methods interact with the RTEMS Super-core. Lastly, a section is covered concerning common debugging and performance issues of real-time systems. Upon completion of POSIX API class, the students understanding relative to the makeup and execution of POSIX will have increased substantially.

The Board Support Package (BSP) and Device Driver Class thoroughly detail the semantics associated with building and maintaining board support packages and device drivers. Upon its completion, software professionals will have added a vast amount of knowledge, and should be comfortable with the idea of incorporating RTEMS into their platform. RTEMS components covered include: Analog, Discrete, Clock, Timer, Real-Time Clock, Console, Initialize, Linker, Makefiles, Networking, Non-Volatile Memory, Shared Memory, Support Routines, Target Dependencies, Debugging, and Performance Monitoring.

Hotel / Travel Information:

www.uah.edu/BevillCenter
www.huntsville.org

Please complete the form below and fax to +1-256-722-0985:

OAR CORPORATION

4910-L Corporate Drive
Huntsville, AL 35805

Phone: 256-722-9985
Fax: 256-722-0985
Email: sales@oarcorp.com

Name _____
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Method of Payment Visa
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RTEMS Class Registration

Sign up for: Attendees Price each
 RTEMS Class—Huntsville, Apr 2-4 \$1,500 each
Total: _____
Additional Attendees _____
Name _____
Name _____
Name _____
Name _____