



**Principles & Practices of Mechanical Engineering
Refresher Course - 6:00pm to 9:00pm
University of Hawaii at Manoa
Holmes Hall – Room 309
July thru October, 2006 – For October 27, 2006 Exam**

2006-2007 Officers

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The following questions and answers are provided to all qualified candidates that are interested in sitting in the Principles & Practices of Mechanical Engineering (P.E. – Mechanical) exam which is scheduled for Friday, October 27, 2006. These questions & answers will serve as a general guideline to the P.E. candidate in preparation for the upcoming exam.

1. Who are the sponsors of the P.E. Refresher Course? (Revised 7/12/06)

The American Society of Mechanical Engineers (ASME) – Hawaii Section is sponsoring the refresher course. For more information on ASME – Hawaii, please visit www.sections.asme.org/hawaii. Additional sponsors include the Dept. of Mechanical Engineering and the volunteer instructors from the University of Hawaii at Manoa.

2. Why is the ASME Hawaii Section sponsoring the P.E. Refresher course?

By sponsoring and providing volunteer engineering professionals to conduct the P.E. Refresher course, the ASME Hawaii section is fulfilling it's mission in accordance with section by-laws which is to "promote the Arts & Science of mechanical engineering and allied arts and sciences; to encourage research; to foster engineering education; to advance the standards of engineering; to promote the networking of engineers among themselves and with allied technologists; and severally and in cooperation with other engineering and technical societies to broaden the usefulness of the engineering profession."

3. Where will the P.E. Refresher course be held? (Revised 7/12/06)

The course location will be at the University of Hawaii at Manoa – Holmes Hall, Room 209. Parking will be available in the main parking structure and/or the parking area adjacent to Holmes Hall/POST Bldg. after 4:00pm for a flat fee of \$3.00.

4. What days and time will instructions be held? (Revised 7/12/06)

The instructions will be held on Tuesday evenings from 6:00pm to 9:00pm starting August 1, 2006. An informational meeting will be held on Thursday, July 27, 2006 from 6:00pm to 7:00pm. Meeting location is at Holmes Hall, Room 242.

5. What is the frequency of instructions? (Revised 7/12/06)

The classes will be held every Tuesday evenings at the times stated above and will recur every week up until the exam date scheduled for Friday, October 27, 2006.

Payment Deadline: On or before July 31, 2006

Make check payable to: ASME Hawaii

Cost: \$200.00

Send payment to:

Mr. Derick Kam - Thermal Engineering Corporation, 512 Kalihi St., Honolulu, Hawaii 96819

6. Who are the volunteer instructors for the P.E. Refresher course?

The volunteer instructors are Stephen M. Masutani, PhD., P.E. and Charles Kinoshita, PhD., P.E. Both are researchers and practicing licensed engineers at the University of Hawaii at Manoa. Both instructors are qualified and dedicated professionals in the profession.

7. How much will the course cost?

The cost of the course is \$200.00 for members and non-members.

8. What does the \$200.00 go toward?

The \$200.00 collected from each candidate will help to offset reproduction costs, costs for certificates of completion, award plaques, refreshments and other miscellaneous costs.

9. What will the course be based on? (Revised 7/12/06)

The refresher course will be based on the Mechanical Engineering Reference Manual, 12th Edition written by Michael R. Lindeburg, P.E. and updated for the breadth-and-depth PE exam.

10. What are the areas of focus for the course?

The exam consists of 80 multiple choice questions from the fields of 1) thermal sciences, 2) machine design and 3)HVAC/R. Since Hawaii does not have much manufacturing and work in machine design, the course will focus heavily in thermal sciences (thermal dynamics, fluid mechanics, heat transfer) and HVAC/R.

11. Will the candidate be provided with a reference manual? (Revised 7/12/06)

Unfortunately, the cost of the course does not include the reference manual. The candidate is highly encouraged to purchase the manual on his/her own and to keep it as a working reference on the job. ASME Hawaii is a Sales Partner of Professional Publications where the candidate can purchase reference materials at a 20% discount. Please visit www.sections.asme.org/hawaii and click on the link to order reference manuals.

12. What do I bring to the course?

The purpose of the course is to bring mechanical engineers together to focus on passing the exam the first time. Engineers who have recently successfully passed the

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exam will be available to provide tips on what and what not to bring to the class and exam for a successful examination attempt.

13. Will there be any review of subject matter in this course? (Revised 7/12/06)

In general, no review of fundamentals will be provided at the course. The candidate is expected to know the fundamentals of the subject matter. The course will be designed to focus on the relevant sections to study for, the application of the correct formulas to use and mainly solving questions from the reference manual. The candidate is expected to study the topic sections during the week prior to the Tuesday evening class or ask questions outside of the scheduled time for official instruction which is from 6:00pm to 9:00pm.

14. Can the candidate stay longer to use the facilities and study longer outside of instruction hours? (Revised 7/12/06)

Yes, the idea is to make the instructions and environment comfortable and convenient for the candidate. Instructors may or may not be available outside of instruction hours but candidates are welcome to stay longer for additional study time. The University of Hawaii will have ultimate deciding authority to extend time and use of facilities.

15. How do I determine if I qualify for the exam?

The candidate will be responsible for determining whether he/she qualifies for the exam and to obtain and fill out all paperwork to the State of Hawaii Department of Commerce & Consumer Affairs – Professional & Vocational Licensing Division. The candidate is referred to <http://www.hawaii.gov/dcca/areas/pvl/boards/engineer/> in order to download pdf information and applications for submittal.

16. What is the registration process for the P.E. exam, how much does it cost and what is the cost of other P.E. Refresher courses?

The exam is a national exam and administered by the National Council of Examiners for Engineering & Surveying (NCEES). The State of Hawaii – DCCA has a separate registration fee of \$75.00 (last year). Once the candidate gets approval from the State to take the exam, the candidate will need to separately apply and pay for the exam fees to NCEES in the amount of \$380.00 (last year). The total cost of exam registrations to the State and NCEES is \$455.00, excluding any fees paid for any refresher courses. The candidate is encouraged to visit www.ncees.org for information on application requirements and deadlines.

Other refresher courses cost in excess of \$500.00 as compared to \$200.00 for the course sponsored by ASME Hawaii. The benefits of taking a local refresher course include:

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- a. Networking with local engineers in the profession.
- b. Instruction from local practicing engineers and guidance from recently registered practicing mechanical engineers.
- c. Economical and more focused instructions and guidance.
- d. Extended support outside of instruction hours.

17. When is the deadline to apply with the State of Hawaii – DCCA for the Friday, October 27, 2006 exam?

The deadline to apply for the Principles & Practices of Engineering (Mechanical Exam) is Monday, July 10, 2006. The candidate is highly encouraged to get all paperwork documenting qualifying experience completed before the deadline to ensure a seat in the examination.

18. Does the candidate need to take the exam if taking this P.E. Refresher course?

No. The candidate may choose to take any future P.E. exams given after the October 27, 2006 exam. However, this course is a good way to gauge your skills in taking future exams and to keep in touch with recent exam candidates.

19. How many candidates are currently interested in taking the course?

Currently, there are about 15 candidates interested in taking the course. The number of candidates may increase as increased marketing of the services progress up until the exam deadline of Monday, July 10, 2006.

20. What if I take the exam and find that I didn't pass the exam? How much will it cost to take the exam again? Will I need to pay the full price to take the exam once more?

The determination to pass the exam is up to the candidate. The more effort put forth in studying and working out problems during the refresher course, the better chances of passing. However, there is no guarantee that taking the course will ensure successful examination.

In the event that the candidate is not successful on his/her first attempt, a nominal fee will apply toward re-examination for the subsequent exam giving in April the year thereafter. The candidate is referred to www.ncees.org for more information on re-examination dates and required fees. It is highly encouraged to also visit <http://www.hawaii.gov/dcca/areas/pvl/boards/engineer/> for any local requirements for re-examination.

21. If I don't pass the exam the first time, can I take the P.E. refresher course again at a nominal fee?

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Depending on the number of interested candidates who qualify for subsequent exams and availability of instructors, all candidates requiring re-examination and who have taken the P.E. refresher course will be allowed to take the course at no charge. Proof of payment for prior attendance will be requested from the candidate. Valid proof of attendance will include a copy of a cancelled check or verification of attendance from existing ASME Hawaii Section records.

22. Who should I contact if I have any other questions about the P.E. Refresher course sponsored by ASME Hawaii and the University of Hawaii?

The main point of contact for more information is Raymond Liu. He may be reached at 497-1395 or email at liur020@hawaii.rr.com.

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