

Kingdom of Saudi Arabia Ministry of Education King Abdulaziz University College of Engineering Mechanical Engineering Department



PhD admission exam

Mechanical Engineering/ Mechanical Power Engineering Thursday 15th February 2024 (10:00 am- 12:00 pm) Department meeting room (24F15) Engineering building.

The exam is an **in- the-class closed book exam** that covers three areas of fluid mechanics, heat transfer and thermodynamics. The exam aims to assess the student's ability to solve, analyze and discuss problems. Below are suggested references for the three exam topics:

References

i) fluid mechanics:

- Fluid Mechanics, Frank M. White, Any addition, McGraw hill.
- Viscous Fluid Flow Frank M. White, Any addition, McGraw hill.

ii) Heat transfer:

- Introduction to Heat Transfer, Frank P. Incropera, David P. DeWitt, Theodore L. Bergman, any addition, Hobokenm NJ: Wiley,
- Convection Heat transfer, Adrian Bijan, John Wiley & Sons, Inc., Hoboken, New Jersey
- Conduction heat transfer, M. Necati Özışık, any edition, John Wiley & Sons

iii) Thermodynamics

- Fundamentals of thermodynamics, C Borgnakke Richard Edwin Sonntag Gordon J Van Wylen, any edition, Wiley
- Advanced Engineering Thermodynamics, Adrian Bejan, any edition, Wiley

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