

	<p><b>Kingdom of Saudi Arabia</b>  <b>Ministry of Education</b>  <b>King Abdulaziz University</b>  <b>College of Engineering</b>  <b>Mechanical Engineering Department</b></p>	
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## PhD admission exam

**Mechanical Engineering/ Mechanical Power Engineering**

**Thursday 20<sup>th</sup> Feb 2025 G (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 in the following fields.

### 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 Özişik, 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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