



CURSO Pós-graduação em Engenharia Química		DEPARTAMENTO Engenharia Química		CENTRO Tecnologia
DISCIPLINA: HEAT EXCHANGER		CÓDIGO DEQ4130	OBRIGATÓRIA ☐	ELETIVA ☒
CARGA HORÁRIA 45 h/a	CRÉDITOS 03	VIGÊNCIA A partir de 2020		

EMENTA

Heat exchangers classification. Global heat transfer coefficient. Logarithm mean temperature difference. Heat exchangers sizing and design.

PROGRAMA:

1. Heat exchangers classification. Shell and tube heat exchangers. Plate heat exchangers. Other heat transfer devices.
2. Heat transfer fundamentals. Energy balances. Temperature difference.
3. Mechanical design. Thermo-hydraulic design.
4. Manufacturers standards. Fouling.
5. Heat exchangers sizing and design. Kern Method. Bell-Delaware method. Current methods.

BIBLIOGRAFIA

Ravagnani, M. A. S. S. and Caballero, J. A. Redes de cambiadores de calor, Editora de la Universidad de Alicante, 2012.

Hewitt, G. F.; Shires, G. L. e Bott, T. R. "Process Heat Transfer", CRC Press, USA, 1994.

Goldstein Jr., L. "Transferência de Calor Industrial", Editora da UNICAMP, 1987.

Kern, D. "Process Heat Transfer", McGraw-Hill, USA, 1950.