

Spring 2018 VACT 1900-01 "Foundations of Vacuum Science"

Course: VACT 1900-01 Foundations of Vacuum Science (2 credits)
Dates: Starts the week of March 12, 2018; concludes by May 11, 2018
Time: Fully online course; instructor specifies due dates for assignments
Delivery Location: Normandale Community College located in Bloomington, MN

Course Catalog Description: Basic principles of chemistry, math and physics are applied to the understanding of concepts needed to continue in courses of vacuum technology. Topics include atomic structure, states of matter, compounds, behavior of gases, scientific measurement and calculations, intermolecular forces, and Ohm's Law.

Note: VACT 1900 is intended as a first course for individuals who are employed or will seek employment as a technician and work with vacuum systems. VACT 1900 overviews basic mathematics and science knowledge relevant to understanding vacuum technology and prepares individuals for the sequence of core courses in Normandale Community College's Vacuum and Thin Film Technology academic program curriculum. A student who earns a passing grade in VACT 1900 will be encouraged to enroll in subsequent Vacuum and Thin Film Technology courses which lead to a certificate in Vacuum Technology. The subsequent courses in the sequence include: VACT 1292 (Intro to Vacuum Technology - 2 credits), VACT 2293 (Vacuum Analysis and Troubleshooting - 4 credits) and VACT 2297 (Thin Film Deposition - 3 credits).



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Bloomington, MN 55431
Telephone: 952-358-8200

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Enrollment/Registration Form for Third Party Employer Billing

Identify the Employer/Organization Name responsible for payment in this field

Student Name: _____
(Last, First, Middle Initial)

Personal Address: _____

Email (Personal - REQUIRED): _____

Date of birth*: _____ **Gender*:** _____ Male _____ Female
**Providing this data is voluntary. However, it is vital information for you to gain access to accounts that will be created for you. Failure to provide the data may impede your ability to access your course's learning environment (email, Desire2Learn).*

Educational history: _____ High school graduate/GED _____ Some college/associate degree
_____ Bachelor's degree _____ Other (please specify) _____

Citizenship: _____ US _____ Other (please specify) _____

Residency: In what other state(s) have you lived in the past year? _____

Preferred Educational Training Type: (select one)

_____ **Credit:** Earn a course grade – student is enrolled and obligated to fulfill course requirements.

_____ **Audit:** Receive an AU (audit grade) – student is enrolled without obligation to fulfill course requirements. Audited classes carry NO credit or grade point average value.

Employee/Student Agreement
I authorize Normandale Community College to release my course grade in VACT 1900 Foundations of Vacuum Science to my direct supervisor (named below) or other representative designated by my employer.

Employee's Signature: _____ **Date:** _____

Supervisor's Authorization
I authorize the above named individual to enroll in VACT 1900 Foundations of Vacuum Science. Tuition and fees will be paid to Normandale by the organization named.

Supervisor's Signature: _____ **Date:** _____

For College Use:

_____ Tech ID	_____ Date created/Staff			
_____ YRTR	_____ Course ID	_____ Course	_____ GM	_____ Date registered/Staff