

## NUFAB Rates for NU Users (2018-19)

For external academic users and companies with

less than 50 employees: Multiply by 1.5

For larger companies: Multiply by 2

CATEGORY	RATE	DESCRIPTION
<b>CLEANROOM (CR) CHARGES</b>		
Hourly Rate	\$ 15	Per Hour
<b>EQUIPMENT CHARGES</b>		
Acid/Solvent Hoods and Supplied Chemicals	\$ -	Included in CR charge
ALD-Arradiance GEMStar-6XT-P	\$ 30	Per Hour
Blue-M Ovens	\$ -	Included in CR charge
Contact Angle Measurement (VCA Optima XE)	\$ -	Included in CR charge
Critical Point Dryer - Tousimis	\$ 25	Per Hour
Developer Hood and Supplied Chemicals	\$ -	Included in CR charge
Doping-Boron (p-type) - Tystar-2 furnace	\$ 20	Per Hour
Doping-Phosphorus (n-type) - Tystar-3 furnace	\$ 20	Per Hour
DRIE (STS Pegasus)	\$ 50	Per Hour
E-beam Evaporator (AJA)	\$ 40	Per Hour
eBL (Raith)	\$ 70	Per Hour
Electrical Test Station	\$ 20	Per Hour
Ellipsometer-JA Woolam Alpha SE	\$ 20	Per Hour
Flood Exposure	\$ -	Included in CR charge
LPCVD Nitride - Tystar-6 furnace	\$ 50	Per Hour
Mask Aligner (Suss MABA6)	\$ 30	Per Hour
Mask Aligner (Suss MJB4)	\$ 20	Per Hour
Maskless Aligner (Heidelberg MLA150)	\$ 60	Per Hour
Maskless Aligner (Heidelberg uPG501)	\$ 40	Per Hour
Optical Microscopes	\$ -	Included in CR charge
Optical Profilometer (Zygo NexView)	\$ 30	Per Hour
Parylene Coater	\$ 20	Per Hour
PECVD (STS)	\$ 35	Per Hour
Plasma Cleaner - SAMCO	\$ 10	Per Hour
Profilometer (Dektak 8)	\$ 20	Per Hour
ProtoLaser R (LPKF)	\$ 40	Per Hour
ProtoLaser U4 (LPKF)	\$ 40	Per Hour
Reflectometer (Filmetrics F20)	\$ -	Included in CR charge
RIE (Samco 10NR)	\$ 22	Per Hour
RTA/RTP (Allwin21)	\$ 30	Per Hour
Spinner/Bake Hoods	\$ -	Included in CR charge
Sputter (AJA)	\$ 30	Per Hour
Thermal Evaporator (Denton)	\$ 30	Per Hour
Wet/dry Oxidation - Tystar-1 furnace	\$ 30	Per Hour
Wire Bonder-Ball (iBond5000)	\$ 20	Per Hour
Wire Bonder-Wedge (WestBond)	\$ 20	Per Hour
XeF2 Etcher	\$ 30	Per Hour
<b>TRAINING CHARGES</b>		
Equipment Training	\$ 100	Per Trainee Per Equipment
Hands-on Clean Room Training	\$ 100	Per Trainee
Process Support (Tech Assist)	\$ 65	Per Hour

## NUANCE Center Reservations and Rates policies

### Reservations

Using NUcore, <http://www.nucore.northwestern.edu>, reservations can be made by half hour periods for the duration required.

### Daytime, Evening & Weekend and Overnight access

'Daytime' is from 9am to 5pm, Monday through Friday. 'Evening & Weekend' access is available for those who have obtained approval by the appropriate instrument manager. Discounts may apply for instruments during these 'off-hours' times. During university holidays, NUANCE is accessible to Users with Evening & Weekend access, though facilities staff may not be available to offer technical assistance.

### Early login and late logoff

You are allowed to login 5 minutes earlier than reserved start time; should you require an earlier login, you will need to move your reservation in NUcore. Should you determine that time beyond your reservation is needed, you are required to **extend** your reservation in NUcore. Time beyond the reservation end-time is charged in minutes.

### Partly used reservations

If reserved time is not fully used, you will be charged according to reserved time. Do not reserve time more than needed. (If you have a reservation, another user is barred from using the instrument.)

### Unused reservation

If you do not login within 30 minutes after your reserved start time, you will be charged a minimum of 1 hour. After this 30-minute period, another user may use the instrument.

### Cancelled reservation

You will not be charged if you cancel your instrument, service or training reservation 24 hours or more ahead of your planned start time. You will be charged a set-up fee if you cancel within 24 hours.

### Forgot to logout

It is imperative that you log off after your session. If you forget to log off, you will be charged the greater of reserved time or 2 hours.

### Report forgotten logouts

If you discover that the previous User forgot to logout and the instrument is no longer in use, you may login.

\*\*\*Please use caution as a User's experiment might be interrupted if you logoff when the instrument is still in use. If in doubt, please contact a facility manager.

### Technical assistance and training fee

Managers post 'technical assistance' and 'training' fees to your NUcore account within 48 hours.

### Consumables

Enter your consumable items when logging off instrument. If you forget, a manager may enter it manually.

### Machine downtime

You will not be charged if the instrument is marked as 'down', even if you have reserved the instrument. You may request to have the charges waived if the equipment is faulty but not marked as 'down' in NUcore; please contact your facility manager immediately to resolve.

**Report equipment problems**

When logging off equipment in NUcore, User should check “problem” or “down” if there was problem during the experiment. Facility managers will receive an email notice and fix the problem as soon as possible. Facility managers will also evaluate if the usage charge should be waived due to the problem reported.

**Questionable charge**

Contact the appropriate instrument manager as soon as possible to discuss any questionable charge. Adjustments must be completed within 90 days to comply with the university policies.

**Billing schedule**

NUANCE closes each month before sending instrument use charges to NU Accounting. We use the chart strings from your User profile, which are validated against the university’s NU Financials database daily.