

Dear MSE 2T0, MSE 1T9+PEY and Graduate Students,

You are the first graduating Toronto-MSE class to be affected by Covid-19 and I am sorry this means we are not able to meet in person to celebrate your graduation just yet.

I want to thank each of you for your part in helping us to get through the abrupt transition to online at the end of last term. That change was hard for all of us: sleep was tougher for me and I imagine it was that way for many of you too.

Of course it is not just a pandemic that we are facing, but also economic instability and our everpresent environmental and sustainability crises. It is a lot to take in and it would be understandable for you to feel overwhelmed.

However, this is exactly what we each must guard against. There are generations before us that have faced times just as tough or even tougher than what we are now facing and they have been able to pull themselves through. We can do the same.

Remember that the most important thing you have learned in your degree is how to think. We are still a field that operates in silos of speciality, but the most important ideas from MSE are those that apply across all systems: history leads to form, form leads to behaviour, and behaviour is how we assess value.

As a blanket rule, every material system is more complicated than you might first think, but each system can still be understood according to the relationships embedded within our materials paradigm. The intrinsic value of your degree is that you will instinctively know how to move between those connections when others will not.

Given all the uncertainty around us, the one thing we do know is that change will keep happening. So learn to adapt more. Make a point of learning to adapt to each new day. The program is simple: wake up, go and explore, find something important, learn from it, sleep, and repeat. You don't have to learn anything technical one day to the next, just keep your mind open: find new music, read different kinds of books. Most of all, keep your spirits up.

We are adapting as a department too. We have been busy this summer re-tooling our program to meet the new online landscape. Not only do we want to make sure that we can offer strong programming in a Covid-19 environment, but we want to offer a program that is better connected and better integrated than we have been able to offer in the past.

There are also new tools for us to teach, with AI changing our field just as it is changing others. This summer we are fitting new data analytics modules into our undergraduate program and we are offering new Materials AI graduate courses as well. As a way of starting to make sense of this new landscape, I encourage you to sign up for Prof. Chattopadhyay's free (to Toronto-MSE) summer workshop on AI in process industries (happening June 15 to 18).

At some point we will be able to meet again in person and it will be my pleasure to shake your hand and tell you how proud I am that you graduated from our program. You will always be part of our Toronto-MSE family and we will want to keep connected with you over the years to come.

In the meantime, take care, keep safe, keep exploring and keep adapting in all ways. The world is going to need your best.

Sincerely,

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