

To know how our M. Tech. alumni feel about this course and how they are (<https://facebook.com/groups/1146028623454759/>) doing after completing this course, you may go through the following where some of our former students have expressed their views (organized in alphabetical order, last update 26.07.2023):

Dr. Aatreyee Sarkar:

Myself Dr. Aatreyee Sarkar, currently I am working as Deputy Manager, R&D, New Energy Department, Jio Platforms Limited. In 2013, I completed my M.Tech in Advanced Materials Science and Technology from the Dept. of Physics, NIT Durgapur. Being a B.Tech student of Applied Electronics and Instrumentation Engineering, when I joined M. Tech course, the field of Materials Science was completely new to me but this course opened a new horizon and changed the direction of my life. Now being a part of Industry research, I realize how much crucial role this course has played for me to reach this position. Advanced Materials Science plays a key role in all the new age technologies. I am forever grateful to the esteemed professors of the Dept. of Physics, NIT Durgapur for their guidance and encouragement. I can say I am a proud alumni of Physics Department and look forward to contribute my learnings for real life applications.

<https://www.linkedin.com/in/dr-aatreyee-sarkar-phd-b23b3857>

Dr. Abhishek Maikap:

I am Dr. Abhishek Maikap, currently working as research scientist in IIT Kharagpur. I completed my MTech. in Advanced Materials Science and Technology, Department of Physics, in 2013. The M.Tech program has been proven extremely beneficial for my PhD and Postdoc research. Advanced Materials Science is a very much relevant and important subject to work on new age technologies. I am deeply grateful for the guidance and support I have received from the distinguished faculty of the Department of Physics.

<https://www.linkedin.com/in/dr-abhishek-maikap-b2b31458>

Asim Senapati:

I am Asim Senapati, currently pursuing my Ph.D. research work in the department of Electronics Engineering at Chang Gung University, Taiwan. I have completed my M.Tech. degree in the Advanced Materials Science and Technology from the Department of Physics, NIT Durgapur, India in the year of 2017. After completing my degree, I joined the Ph.D. program at Chang Gung University, Taiwan and started to work on the resistive switching memory devices and ferroelectric memory devices. Without knowing the material science in depth, it could be much more difficult to shape my Ph.D. research work. Thanks to my M.Tech studies where I not only gained good theoretical knowledge through the coursework but also gained a significant skill to be an independent researcher. Especially almost one year research work during the M.Tech. studies definitely boosted my research interest and research skills. I would like to express my sincere gratitude to all the Professors of the Department of Physics, NIT Durgapur for their guidance and motivation. I encourage the

students who wish to build an excellent research career should choose M.Tech in Advanced Materials Science and Technology at Physics Department, NIT Durgapur.

<https://www.linkedin.com/in/asim-senapati-2b82b9227/>

Dr. Avishek Dey

Myself Dr Avishek Dey, alumni (2011-13 batch) of the Advanced Materials Science and Technology , MTech programme of NIT Durgapur. Currently I am a Research Fellow at the Department of Chemistry , University College London. For those, who are yet to hear about UCL, it is one of the leading research intensive universities in the UK and is ranked number 9 in the world according to the recent QS world rankings. I am proud to say that this MTech programme played a significant role for me to achieve a research position at this world leading university.

The programme introduced me to the exciting fields of nanotechnology research. During this programme I got trained on the key laboratory skills and techniques in planning and building experiments, analysis and comparison of results. This programme provides a comprehensive coverage of the technological and scientific foundations of nanotechnology, from the basics of nanostructures to advanced fabrication techniques, from fundamental quantum and molecular physics to advanced characterisation techniques, from nanotechnology in life science to nanotechnology in energy sciences. The program gave me a platform to excel as a researcher and to progress towards my ambitions of global sustainability.

The programme is timely and has been designed for postgraduates from the physical sciences and graduates from relevant engineering disciplines who wish to develop their skills necessary for a career in this field, either as industrial researchers, technical managers or academic researchers. Moreover the department academics hold an excellent internationally acclaimed research footprint. Particularly advantageous if anyone is keen like me to embark on an international programme. The programme seamlessly delivers the necessary knowledge required for a career in modern-day high-tech industries. I benefited significantly from this M.Tech program ,I hope that one day, you will be able to say the same!

<https://www.linkedin.com/in/dravishekdey/>

Dr Barnali Ghatak:

I am Dr Barnali Ghatak. I was with the Department of Physics during my Master's in AMST in 2013-2015. The curriculum was so organised which helped me to groom me as a researcher so that I can make impactful contribution to research and development during my doctorate studies. Specifically, the end to end grooming session by the esteemed profs meant a lot to shape up our characteristic as an independent researcher. Since completion of M. Tech., I have bagged several prestigious fellowships including the DST INSPIRE fellowship, NIDHI EIR fellowship, DST-SEED young scientist award, and DST-INSPIRE Faculty Fellowship. Post completion of Ph.D. from JU, I have founded SBH ELECTROCLOUD PVT LTD, Kolkata where I now work as the CEO.

<https://www.linkedin.com/in/dr-barnali-ghatak-77a62b5b/>

Dr. Dhiraj Kumar Rana:

Myself Dhiraj Kumar Rana, I am a postdoctoral fellow at IIT Delhi's Department of Materials Science and Engineering. I successfully completed my M.Tech program in Advanced Materials Science and Technology, Department of Physics, in 2013. My M. Tech program's learnings played a crucial role in my research career. The guidance and support of the professors of Physics Dept. have a pivotal role in my achievement of the renowned SERB-National Postdoctoral fellowship (NPDF). I am proud to be a member of this prestigious institution.

<https://www.linkedin.com/in/dr-dhiraj-kumar-rana-82832917>

Dr. Darpan Verma:

Dear aspiring learners, I am Dr. Darpan Verma, currently thriving as a Data Scientist/Device Engineer at Intel Corporation in Hillsboro, USA. It is with immense joy that I share my educational journey, profoundly shaped by the exceptional experience of pursuing the M.Tech. in Advanced Material Science and Technology (AMST) at NIT Durgapur, within the Department of Physics. I wholeheartedly encourage you to consider enrolling in this transformative course.

NIT Durgapur stands tall among India's top institutions, boasting an outstanding faculty in the Department of Physics. The meticulously designed structure of the AMST course lays a strong academic foundation, equipping students with invaluable skills that are highly sought after in the industry. The Department of Physics at NIT Durgapur provides a nurturing and collaborative learning environment, where the exchange of ideas with peers enriches personal and professional growth. This remarkable foundation paved the way for my Ph.D. pursuit at the prestigious Ohio State University, renowned for its premier Material Science Engineering department. The impact of my education at NIT Durgapur played a significant role in my admission, reaffirming the institution's commitment to excellence.

With unwavering enthusiasm, I wholeheartedly encourage you to consider the AMST course offered by the Department of Physics at NIT Durgapur. This educational journey will not only nurture academic growth but also foster research and innovation, setting you on the path to a successful and fulfilling future. Embrace the boundless opportunities that await you at NIT Durgapur and shape your destiny with confidence!

<https://www.linkedin.com/in/darpanverma/>

Dr. Ishita Chakraborty:

I am Ishita Chakraborty, currently working as a Postdoctoral researcher at Chang Gung University, Taiwan. I have completed my M.Tech degree in Advanced Materials Science and Technology from the Department of Physics, NIT Durgapur, India in the year of 2017. Immediately after completing my degree, I joined the Ph.D. program at Chang Gung University, Taiwan. The knowledge that I gained from the coursework and research work during my M. Tech study helped me a lot in my Ph.D. journey. In my M.Tech study apart

from gaining in depth knowledge about the theoretical background, I also got a significant practical exposure to research environment where I learned several important skills that helped me to grow as an independent researcher. I would like to express my deepest gratitude to all the Professors of the Department of Physics, NIT Durgapur for their guidance. Therefore I encourage the students willing to start their research career to join the M.Tech course in the Department of Physics, NIT Durgapur.

<https://www.linkedin.com/in/ishita-chakraborty-719710116/>

Mayukh Mandal:

I am Mayukh Mandal, I am writing this to express my profound gratitude for the invaluable education and experiences, which I have received during my Master of Technology program in the Advanced Materials Science and Technology (AMST), Department of Physics. I have completed my M.Tech in this year i.e 2023 and in this very year I got the opportunity to do research at IIT Madras and as well as at IIT Delhi and IIT Kharagpur but I am pursuing my research at IITM in the department of Electrical Engineering. The two years of my M.Tech journey in AMST at NIT Durgapur has given to me not only the exposure but also the generous support and guidance from the faculties. Completing my Master's degree in AMST has been a transformative journey, and I am deeply grateful to the entire Physics Department for providing an enriching environment that helped me in both my academic and personal growth. The dedication, expertise, and passion of all the faculties and staffs have left an indelible mark on my life, and I feel privileged to have been a part of this esteemed department. Moreover, the state of facilities and resources available within the department encouraged me to dive in further research. All these opportunities and knowledge helped me a lot to get the PhD position in the IITs. Once again, I want to express my heartfelt thanks to the entire AMST(Physics) department for their continuous support.

<https://www.linkedin.com/in/mayukh-mandal-0303231b4/>

Dr. Monalisa Char:

Myself Dr. Monalisa Char, an alumnus (2013-15 batch) of the M. Tech. program in Advanced Materials Science and Technology of NIT Durgapur offered by the Department of Physics. Currently I am working as an Assistant Professor and Head of the Department of Materials Science & Technology at Maulana Abul Kalam Azad University of Technology, WB (MAKAUT WB). I wish to express my heartfelt appreciation for the exceptional educational experience at NIT Durgapur that have shaped my academic and professional journey. The program's curriculum was meticulously designed to encompass a wide range of current topics blending fundamental principles with cutting-edge research and industry applications. The faculty members at the Department deserve my utmost respect and gratitude. The exposure to state-of-the-art research facilities during our M. Tech program was a defining aspect of my academic journey. I wholeheartedly recommend this program to prospective students who aspire to make a significant impact in the field of materials science and technology. Without a doubt, the experience gained here will be an invaluable asset throughout their career.

https://makautwb.ac.in/plugin.php?e=WBUTtool&f=faculty_profile&user_id=124

Dr. Nilanjan Chakrabarty:

I am Dr. Nilanjan Chakrabarty, currently working as a Manager-Battery R&D, at Larsen &Toubro. I have completed my M.Tech Degree in 2013 in Advanced Materials Science and Technology from Department of Physics, NIT Durgapur. The course structure was comprehensive and it helped me a lot during my PhD program. I was fortunate enough to have great mentors, who not only guided me through my project but also kept me motivated to continue research. I am deeply grateful to the professors for their support throughout my research career. I am honoured to be a part of the institute.

<https://www.linkedin.com/in/nilanjan-chakrabarty-1b594317/>

Sachin Kumar:

I am Sachin Kumar, currently pursuing my PhD in the Department of Materials Science and Engineering at IIT Kanpur. In 2020, I successfully completed my MTech degree in the AMST, Department of Physics NIT Durgapur. The comprehensive curriculum and coursework during my MTech program have proven immensely valuable, providing crucial support for my ongoing PhD research. I am deeply grateful for the guidance and support I received from the esteemed professors in the Department of Physics, which played a pivotal role in my achievement of the prestigious Prime Minister Research Scholarship (PMRF) fellowship. I am honored to be a part of this esteemed institute and look forward to contributing to the field of research and academic excellence in the future.

Dr. Sidharth Sanadhya:

Hello, my name is Sidharth Sanadhya. I am an alumnus of NIT-Durgapur, M.Tech batch of 2015 -2017 in the Advanced Materials Science and Technology (AMST) course offered by the Department of Physics. I am currently a research associate (post-doc) at the Department of Mechanical and Aerospace Engineering, University of Florida, U.S.A and earned my PhD in June 2023. I entered the M.Tech. course in AMST after qualifying GATE 2015 and chose NIT-Durgapur as my seat of higher learning. Having a mechanical engineering background, the transition to a graduate degree in materials science seemed an unconventional choice at the time. However, choosing M.Tech. in AMST turned out to be one of the best decisions of my career for a multitude of reasons, which I wish to expound with great delight.

The knowledge of materials science is a primary requirement for a mechanical engineer as no manufacturing process or system can be designed without a sound understanding of materials behavior and identification/characterization. Therefore, pursuing M.Tech. in AMST provided me with a parallel set of advanced skills in materials science that complement my mechanical engineering background, and which I carried with into my PhD. AMST course introduced me to a broad variety of material characterization techniques which is one of the most important skills to have as a scientist or engineer since it taught me the capabilities and limitations of a variety of characterization techniques that allow me chose the right technique for the material that wish to use/ synthesize. Furthermore, I also learnt fundamental underpinnings of electrical, optical and mechanical behavior of materials and the application of computational tools in materials science. Overall, the rigorous and

comprehensive coursework is designed and taught by some of the finest faculty members of the Department of Physics, which are there for the students to aid their learning at every step of the course. Most interestingly, the course is open to engineers from electrical, mechanical and chemical engineering backgrounds and for students with pure science backgrounds such as physics and chemistry. This provided me with a unique cross-domain experience that fostered the exchange of ideas, knowledge, skill and learning which is not found in other graduate courses in NIT-Durgapur. Furthermore, I got the opportunity to attend multiple skill enhancing short term courses, seminars and scientific conferences where industry and scientific experts from India and abroad participated to share their knowledge and expertise.

Furthermore, the second part of the course is research driven which comprises of 2 semesters of dedicated research work in one of the labs of the Physics Department. It was this period that laid the strong foundation of research in me and propelled me towards a PhD. I got the opportunity to learn both computational and experimental research in one of the finest labs of the institute, i.e., the Carbon Nanotechnology Lab. Here I learnt advanced molecular simulation techniques for synthesizing and modeling the properties of 2D nanomaterials such as carbon nanotubes and graphene. While working on these computational research problems, I also got the opportunity to develop my programming skills in advanced languages such as C++ and Python, a skill that helped me tremendously in my PhD and is highly valued by industrial/scientific recruiters in the U.S.A. Moreover, in the second semester of my research, I got the once in a lifetime opportunity to complete the experimental part of my research work at the Stephenson Institute for Renewable Energy, University of Liverpool, U.K. as a part of a fully funded combined U.K.- India research project. To the best of my knowledge, no other M.Tech. program at the institute provided such an opportunity. During my 5 months stay at the University of Liverpool, I worked with some of the most accomplished research scholars and scientists that worked in cutting-edge renewable energy technologies such as solar photovoltaics, batteries, and solar hydrogen generation. This provided the perfect opportunity to utilize my learning in material characterization and simulation for developing hybrid nanomaterial that could split water in hydrogen and oxygen upon exposure to sunlight. As a student, I could not have asked for more from a graduate program. It is due to the all the skills, knowledge, and experience that I accrued in the AMST course with the constant support from my supervisor, colleagues, and the department that I was able to secure a PhD in one of the top 5 public universities of America. I owe my success to the AMST course and the Department of Physics at NIT-Durgapur. As a matter of fact, many of my batchmates and friends are in top research positions in India and around the globe, leading highly satisfying and professionally rewarding lives as scientists and engineers. Therefore, it is a matter of great pride and joy for me to reminisce my M.Tech. days in the Department of Physics at NIT-Durgapur and I wish all the more success to the incoming students of the AMST course.

<https://mae.ufl.edu/2022/10/04/sidharth-sanadhya-achieves-major-breakthrough-in-separation-science/>

Dr. Sumit Majumder:

I'm Dr. Sumit Majumder, a postdoctoral fellow at National University of Singapore (NUS). I completed my MTech. in Advanced Materials Science and Technology , Department of Physics, in 2013. The M.Tech course has been of great benefit for my PhD and on-going postdoc research. The learnings of the course shaped my research and played a significant role in my achievement. I am very much grateful to my professors for their support and guidance.

<https://www.linkedin.com/in/sumit-majumder-14649b4a>