

ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਇੰਜੀਨੀਅਰਿੰਗ ਕਾਲਿਜ **Guru Nanak Dev Engineering College**

An Autonomous College U/S 2(f) and 12(B) of UGC Act 1956

NBA Accredited Programmes under Tier-I (Washington Accord), "A" Grade NAAC Accredited, TCS Accredited AICTE Approved, Punjab Govt. Aided Status - Affiliated to I. K. Gujral Punjab Technical University, ISO: 9001:2008 Certified

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LETTER OF RECOMMENDATION

It is my immense pleasure to recommend Mr Harinderpal Singh Cheema for Master's program at your distinguished University. I know Harinderpal for about 1.5 years during which he managed to impress me with traits of his personality.

I recall that during my tenure as his teacher of Design of Concrete Structures-II, he proved that he has a technical bent of mind and a very systematic approach that helps him to analyse and solve problems. His qualities like enthusiasm, self-motivation and determination enabled him to get selected for the Testing and Consultancy Cell during one semester entirely devoted to Industrial Training, where he took keen interest and devoted time to learning new aspects of his studies

He worked hard and learned about Interpolation which he used in preparing spreadsheets on concrete structures and make it understood to all who don't know how to interpolate through an impressive presentation. Harinderpal was involved in designing a 0.7 MLD Sewage Treatment Plant during his training, which was a real project and was constructed later. He assisted in design and prepared cost estimate. He designed and analysed Concrete Structures using STAAD Pro and his proficiency in using various Open Source Software (which is not so common among Civil Engineering Students) is admirable.

He took special interest to learn Differential Global Positioning System (DGPS), and put enormous efforts to produce precise results and maps from the same. He successfully produced results using open-source software RtkLib. Moreover, he is the only one in his batch who went one step ahead and learnt gvSIG software which is used for GIS mapping. He learned layering and editing shape files and is still continuing to learn Massive Open Online Course (MOOC). His voluntary learning attitude not only sets him apart from rest of his batch but also highlight his ability to venture beyond the scope of course syllabi.

Harinderpal is a result oriented, hardworking and strong willed person who has high learning goals in life. I highly recommend that he should be given the opportunity to attend your program.

Prof (Dr). Hardeep Singh Rai

Professor of Civil Engineering and Dean, Testing and Consultancy Cell Guru Nanak Dev Engineering College Ludhiana, Punjab, India.

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